

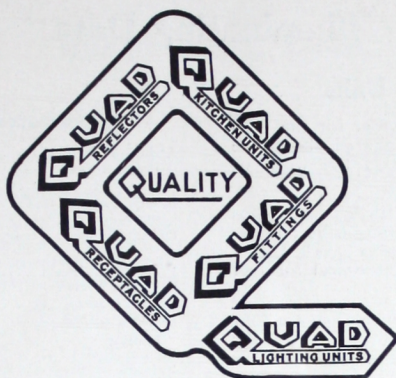
QUAD

LIGHTING UNITS



INDUSTRIAL
and **COMMERCIAL**
CATALOG NO. 4





**FOR INDUSTRIAL
AND COMMERCIAL
REQUIREMENTS**

CATALOG NO. 4

QUADRANGLE MFG. CO.

32 South Peoria Street
CHICAGO



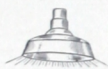
Illuminating Data

Types of Lighting Units

The selection of proper equipment for the general illumination of any working area should be largely governed by the nature of the work or business to be conducted.

For example, certain manufacturing operations in the textile industry seem to proceed best under Indirect lighting. In other lines of work Direct lighting appears to be the most practical form of illumination.

On the following pages of this catalog are four general types of lighting units from which to make selection. The types and their characteristics are as follows:



Direct lighting is the form most generally used for industrial illumination. This type of unit is practical and economical, delivering on the work a very high per cent of the light generated by the lamp. It is sometimes advisable, however, to use an enclosing bowl, as in the Glassteel Diffuser, to soften shadows and reduce glare.



Indirect lighting practically converts the ceiling of a room into the source of light. By this method shadows are reduced to the minimum and the illumination on horizontal surfaces is good, provided ceilings are light and lamps of sufficient power are used.



Semi-Indirect lighting combines to some degree the qualities of the direct and indirect systems. Shadows and glare are less apparent than with direct lighting and the illumination on vertical surfaces is somewhat better than with indirect. The appearance of the room is more favorable.



Enclosing type units are used more frequently than any other for lighting stores and offices. The bowls being of light density deliver a high per cent of the light output of the lamp with the result that direct and reflected glare are slightly increased. This type unit is easily maintained as its efficiency is not readily affected by dust.

Lighting Intensities

The recommended lighting intensities expressed in foot candles in Table I represent the minimum of illumination which may be considered as good lighting.

While the table does not fully cover all lines of industrial activity, yet the classes of work listed are of such variety as to suggest the proper intensity for almost any line of work.

Table I

Recommended Foot Candle Intensities

Auditorium	5	Office Buildings:	
Armory	8	Offices	8-10
Bank:		Corridors	5
Lobby	6	Lobby	6
Cages	10	Paint Shop:	
Canning Foods	8-10	Dipping, Spraying	5
Cloth Products:		Fine Finishing	10
Light Goods	10	Extra Fine Furniture...	15
Dark Goods	18	Printing:	
Dairy Products	8	Press Room	8
Drafting Rooms	15	Composing Room	12
Foundry:		Restaurant	6
Rough Molding	6	School, Class Room...	8
Fine Molding	10	Store:	
Gymnasium	8	First Floor	12
Hospital:		Other Floors	8-10
Ward	3	Textile Mills:	
Operating Room	10-50	Weaving Light Goods..	12
Machine Shop:		Knitting Machines	10
Rough Work	6	Wood Working:	
Ordinary Work	10	Rough	5-8
Fine Work	15	Fine	10-12

DEPRECIATION FACTOR—In order to maintain the desired intensities in spite of aging of lamps, accumulation of dust, and deterioration of reflecting value of walls, the intensities recommended above should be increased by 30 to 50 per cent when calculating size of lamp.

For dirty locations or where cleaning is infrequent..... 1.5
For fairly clean locations..... 1.3

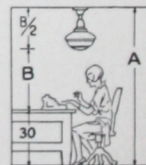
Mounting and Spacing

Mounting height and spacing distance are usually determined by the proportions of the building, but it is a good rule to place lighting units **no farther apart** than one and one-half times their height above the working plane.*

Present day standards of efficient plant operation often requires very high lighting intensities necessitating much closer spacing of units.

From one to six units may be spaced symmetrically in a bay and for productive lighting it is sometimes advisable to disregard bays entirely, spacing units equidistant in both directions.

An approximately correct mounting height for pendant fixtures in stores, offices and other similar interiors is two-thirds of the distance up from table top to ceiling. However, in large rooms higher mounting may be used with practically no loss of intensity.



A—Ceiling Height
B—Mounting Height
B/2—Fixture Length

*The working plane is assumed to be 30 inches above the floor or at top of desk or work bench.

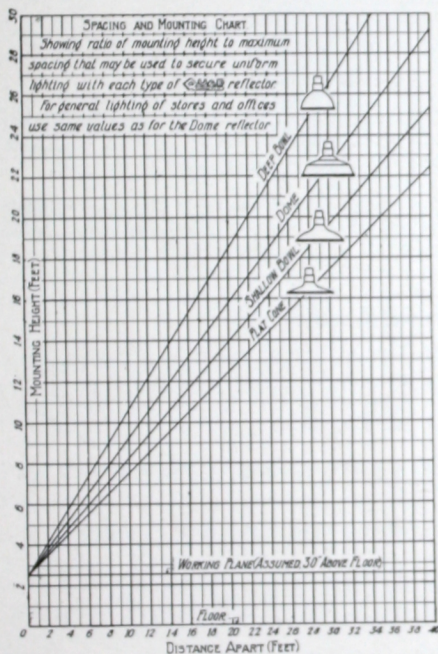
Illuminating Data

Mounting and Spacing

In industrial plants reflectors should be mounted slightly below bottom chord of roof trusses or other obstructions such as line shafting, pipes, etc.

With porcelain enameled steel reflectors more accurate light control is obtained and spacing ratios for the various types given in Table II should be followed if practicable to secure uniform illumination.

Table II



Per Cent of Light Utilized

The size and proportions of a room have a direct effect on the per cent of light delivered on the working plane by any unit. For example, a long, narrow room has more wall space in proportion to its area than a square room, and hence absorbs more light.

Utilization factors for various types of lighting units given in Table III are for rooms of nearly square proportions having walls and ceiling that are finished fairly light.

Table III

Per Cent of Utilization Obtained in Rooms of Square Proportions and with Fairly Light Walls and Ceilings

For rooms of less than 10,000 square feet area that are either long and narrow or have fairly dark walls and ceilings, the per cent of effective lumens given in Table III should be decreased by about 8 points.

DIRECT		INDIRECT	
SIZE OF ROOM	AREA SQ. FEET	MOUNTING HEIGHT (FEET) ABOVE WORKING PLANE	MOUNTING HEIGHT (FEET) ABOVE WORKING PLANE
		4 5 6 7 8 10 16 30	6 7 9 10 12 15 24 45
10, 10	100	49 45 42 34 34 -	18 15 15 11 11 -
12, 12	144	52 49 45 42 34 -	20 18 15 13 11 -
14, 14	196	52 49 45 42 34 -	20 18 15 13 11 -
16, 16	256	57 52 49 45 42 34	22 20 18 15 13 11
20, 20	400	61 57 52 49 45 34	24 22 20 18 15 11
24, 24	576	63 61 57 52 49 42	26 24 22 20 18 13
30, 30	900	66 63 61 57 52 45 34	28 26 24 22 20 15 11
35, 35	1200	66 63 63 61 57 52 45 34	28 26 24 22 20 15 11
40, 40	1600	67 66 63 63 61 57 49 34	28 26 24 22 20 15 11
50, 50	2500	67 66 66 63 61 52 47 30	28 26 24 22 20 13
70, 70	4900	67 67 67 66 63 57 49 30	28 26 24 22 20 13
100, 100	10000	67 67 67 67 67 63 52 30	30 30 30 30 26 20
120, 120	14400	67 67 67 67 67 66 57 30	30 30 30 30 26 20

ENCLOSING		SEMI-INDIRECT	
SIZE OF ROOM	AREA SQ. FEET	MOUNTING HEIGHT (FEET) ABOVE WORKING PLANE	MOUNTING HEIGHT (FEET) ABOVE WORKING PLANE
		4 5 6 7 8 10 16 30	6 7 9 10 12 15 24 45
10, 10	100	31 28 25 20 20 20 -	25 22 19 15 15 -
12, 12	144	34 31 28 25 25 20 -	27 25 22 19 15 -
14, 14	196	34 31 28 25 20 -	27 27 25 22 19 15 -
16, 16	256	38 34 31 28 25 20 -	31 27 25 25 22 19 15 -
20, 20	400	41 38 34 34 31 28 20 -	34 31 27 27 25 22 15 -
24, 24	576	45 41 38 34 34 31 25 -	36 34 31 27 27 25 19 -
30, 30	900	47 43 41 38 38 34 28 20	40 36 34 31 27 22 15
35, 35	1200	47 43 43 41 38 34 28 20	40 36 34 31 27 22 15
40, 40	1600	49 47 43 43 41 38 31 20	42 40 36 34 31 25 15
50, 50	2500	49 49 47 47 43 41 34 25	42 42 40 40 36 34 27 19
70, 70	4900	49 49 49 47 43 38 31 42	42 42 42 40 36 31 25
100, 100	10000	49 49 49 49 49 43 34 42	42 42 42 42 40 36 27
120, 120	14400	49 49 49 49 49 47 38 42	42 42 42 42 40 36 27

Method of Finding Lamp Size

Assuming that a decision has been reached regarding type of unit, intensity of light and height of fixture above work, a very simple calculation is required to find the size of lamp needed.

Rule—Increase desired intensity by 30 to 50 per cent to offset depreciation and multiply by the number of sq. ft. per outlet, then divide by the per cent of light utilized as given in Table III. From Table IV select the lamp having a lumen output most nearly equal to the result of above calculations.



Illuminating Data

Method of Finding Lamp Size

Required lumens per outlet may also be found by using the formula given below.

Symbols	Numerical Values
A = Area of space to be lighted (sq. ft.)
I = Intensity of light, Table I (ft. candles)
D = Depreciation factor, Note under Table I
O = Outlets in space to be lighted
P = Per cent of light utilized, Table III

Note—Find per cent of utilization for unit selected in Table III directly below the mounting height and to the right of indicated room area.

Do not omit decimal points when substituting numerals for symbols.

$$\frac{A I D}{O P} = \text{Required lumens per outlet.}$$

From Table IV select lamp with required lumen output.

Method of Calculating Intensities

When the lamp size is given and it is desired to find the resulting intensities, the following formula should be used:

Let L = Lumen output of lamp as given in Table IV and use other symbols as listed above.

$$\frac{O P L}{A D} = \text{Intensity (foot candles) on working plane.}$$

Table IV

Lumen Output and Other Characteristics of Mazda C Lamps

Lamp Size, 115 V.	Dia.	Overall Filament	Screw
Watts Lumens	In.	Length Length	Base
60 666	2½	5¼ 3¾	Medium
100 1320	2¾	6¼ 4¾	Medium
150 2300	3¾	6½ 5¼	Medium
200 3300	3¾	8½ 6	Medium
300 5400	4¾	9½ 7	Mogul
500 9800	5	9½ 7	Mogul
750 14500	6½	13½ 9½	Mogul
1000 20000	6½	13½ 9½	Mogul

Example

A Men's Furnishing Store on a business street is to be lighted with Enclosed Units. The room is 48 feet wide by 51 feet long with 12-foot ceiling, decorating is of fairly light color.

Referring to Table I we find that the intensity of light recommended for stores is from 8 to 12 foot candles and since some of the merchandise to be handled is of dark color and the store is on a well lighted street, 12 foot candles should be used in order to compare favorably with neighboring stores.

Depreciation factor may be placed at 1.3, as fixtures will be cleaned frequently.

The area, 2,448 sq. ft., divides nicely into 16 bays with an outlet in the center of each bay, which spaces the lighting units about 12 ft. apart.

Referring to the chart, Table II, we note that for stores the recommended ratio of mounting height to spacing is the same as for the dome type reflector and that fixtures spaced 12 ft. apart should be mounted 10½ ft. above the floor, or 8 ft. above the working plane.

From Table III we find that an Enclosing Unit in a room 50x50 ft. square delivers 43 per cent of the light output to the working plane when mounted 8 ft. above.

We can now set down the values we have found, thus:

A = Area in square feet	= 2448.
I = Intensity desired	= 12.
D = Depreciation factor	= 1.3
O = Number of outlets	= 16.
P = Per cent of light utilized =	.43

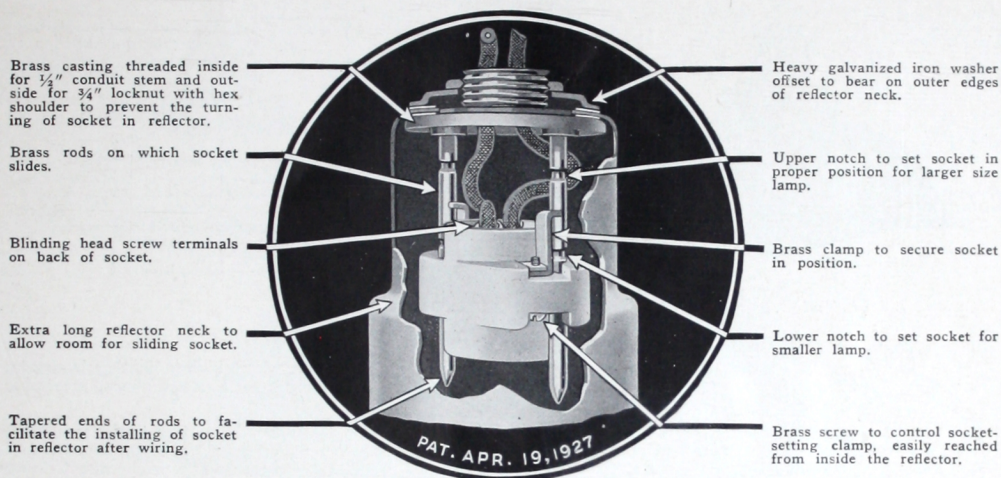
Substituting the values for the symbols in our formula, we have:

$$\frac{2448 \times 12 \times 1.3}{16 \times .43} = \frac{38188.80}{6.88} = 5550 \text{ Lumens required.}$$

In Table IV we find that a 300-watt lamp has a lumen output of 5,400, which most nearly equals the result of our formula. Hence a 300-watt type C lamp in a 16-inch enclosed bowl pendant mounted 10 feet above the floor is the lighting equipment to be recommended.

The Sliding Adjustable Socket

Serves Two Sizes of Lamps in Same Reflectors



Flexibility in Factory Lighting Is Essential

Above is an interior view of the neck of a Quad Socket-Reflector showing the sliding adjustable socket which is the salient feature of this unit.

Socket is of porcelain with mountings entirely of brass, and is therefore rust-proof.

The rods on which the socket slides have two sets of notches, upper and lower, into which the clamps fit with a positive click when socket is pushed up or down. The distance between notches is $\frac{1}{8}$ -inch which is the difference in filament length between the 100 watt and 150 watt lamp or between the 150 watt and 200 watt lamp.

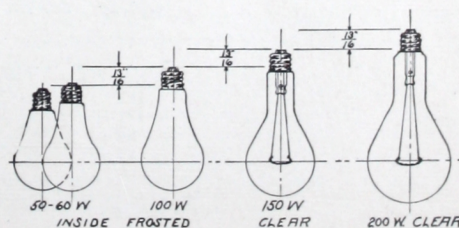
It will be seen that one size of Quad Socket-Reflector will serve the 50, 60 and 100 watt lamps while a larger size reflector will serve 150 and 200 watt lamps.

To change the position of the socket is a very simple operation requiring no other tool than an ordinary screw driver with which to release and tighten the clamps. Position of

socket may be easily changed even after the installation of reflector is completed.

The advantages resulting from the use of this socket in a properly designed reflector are these:

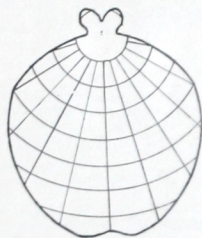
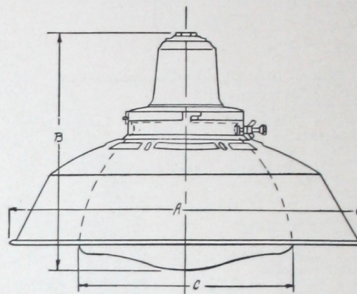
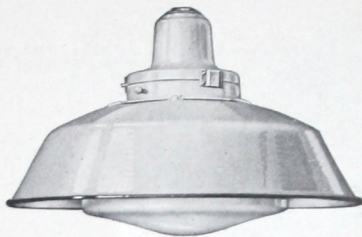
1. Fewer reflectors need be carried in stock for the various sizes of lamps in use.
2. Lighting intensities may be changed at any time by using a larger or smaller lamp without effecting the distribution of light.
3. The distribution of light may be varied as desired by changing the position of socket in the reflector.
4. Sockets may be replaced in case of a "blow-out" without disturbing the reflector installation.



Glassteel Diffuser

Easy Maintenance Safety Type

Made of Armco Iron Porcelain Enameled White with Opal Globe



Distribution Curve

The same distribution of light is obtained with both sizes of Quad Diffuser even though the two lamps listed for the smaller size are of different filament length. The socket used for 150- and 200-watt lamps may be adjusted vertically to bring the filament of either lamp to the correct focal point. See detail of socket construction on page five.

Productive Lighting

Production records in industrial plants show that where higher lighting intensities are used a definite speeding up of production and decreased spoilage almost invariably follow.

The cost of such lighting is negligible when considered in relation to the payroll of the plant or department so lighted and the value of the additional material produced.

Obviously, the lamps used must be large and powerful—but productive lighting without objectionable brightness or glare may be obtained with the Quad Glassteel Diffuser.

This unit has a globe of opal diffusing glass that transmits a high per cent of the light generated at the lamp filament. Surrounding the globe is a large porcelain enameled steel reflector that adds to the diffuse quality of the light and turns the horizontal and upward rays in a useful direction.

Some light is allowed to escape upward through perforations in the reflector. This provides a diffused illumination on the ceiling eliminating the unpleasant contrast that would result from a bright light against a dark background.

Glassteel Diffuser With Opal Globe

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Globe "C"	Socket	Net Wt. Ea., Lbs.	Std. Pkg.
5187	150-200	18"	12"	10"	Adj.-Med.	6½"	4
5207M	300-500	20"	13½"	12"	Mogul	8¼"	4

With Trutint Globe

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Globe "C"	Socket	Net Wt. Ea., Lbs.	Std. Pkg.
4187	150-200	18"	12"	10"	Adj.-Med.	6½"	4
4207M	300-500	20"	13½"	12"	Mogul	8¼"	4

Globes for Replacement

Catalog No.	Watts	Description	Std. Pkg.
101	150-200	Opal Glass, 10x6	4
121	300-500	Opal Glass, 12x6	4
96	150-200	Trutint (Blue), 10x6	4
98	300-500	Trutint (Blue), 12x6	4

Note—For plants or departments where colors must be matched or identified the use of Trutint globes is recommended. Lamps having about one-third more lumen output should be used to maintain lighting intensities obtained with opal globes.

Glassteel Diffuser

Easy Maintenance Safety Type

Made of Armco Iron Porcelain Enameled White with Opal Globe

MAINTENANCE MADE EASY—REFLECTOR AND GLOBE MAY BE REMOVED AS A UNIT FOR THOROUGH CLEANING WITHOUT REMOVING LAMP.

GLOBE HOLDER CONSISTS OF ONE SCREW AND WING NUT WITH CURVED PRESSURE CLIP BEARING AGAINST NECK OF GLOBE. AT OPPOSITE SIDE ARE TWO PROJECTING SPRINGS OF PHOSPHOR BRONZE.

SAFETY—A SELF-LOCKING SPRING LATCH ATTACHED TO ONE OF THREE HOOKS ON REFLECTOR PREVENTS ACCIDENTAL DIS-ENGAGEMENT FROM HOOD.

DIFFUSED LIGHT ON CEILING IS PROVIDED BY PERFORATING PORTION OF REFLECTOR OVERLYING THE GLOBE.

REFLECTOR—ARMCO IRON, PORCELAIN ENAMELED ALL WHITE. ITS RIGID CONSTRUCTION PROTECTS GLOBE. HOOD ALSO IS PORCELAIN ENAMELED WHITE.

INTERCHANGEABLE—GLOBES AND REFLECTORS OF BOTH SIZES HAVE 6 INCH OPENINGS AND MAY BE EASILY INTERCHANGED.

DIFFUSING GLOBE IS OF OPAL GLASS OR TRUTINT (BLUE) GLASS GLOBE IF SPECIFIED.

Maintenance

Rapid depreciation in the light output of units due to the accumulation of dust on the reflecting and light transmitting surfaces often goes on unnoticed. Lighting equipment must be kept clean and bright if productive lighting intensities are to be maintained.

The ease and speed with which the Quad Glassteel Diffuser can be removed, thoroughly cleaned and replaced encourages frequent cleaning and lowers the cost of maintenance.

A spring safety catch, snappy and positive in action, automatically locks the reflector to the hood. Reflector and globe together may be taken down over the lamp thus exposing all the inner and outer surfaces for cleaning.

No attempt is made to remove the hot lamp—it remains lighted so that production is not thrown into semi-darkness while fixture is cleaned.

Safety

The Quad Glassteel Diffuser not only promotes safety by providing good illumination but in its design are a number of unusual safety features.

The globe is supported in the reflector by flexible bronze springs at one side and at the opposite side by a screw having a curved pressure clip at its end. This screw may be set up to secure any desired tension on the springs and held there by a wing locknut, thus allowing for expansion of glassware and preventing accidental loosening of screw.

The globe is further protected against breakage by the rigid steel reflector that surrounds it.

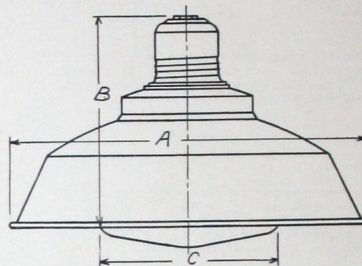
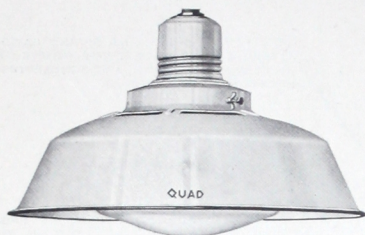
The reflector is secured to the hood by three slotted lugs one of which carries a strong and positive spring latch. As an additional safety, the latch itself is protected by a rigid guard to prevent flexing it beyond the point of resiliency.



Glassteel Diffuser

Standard Threaded Type

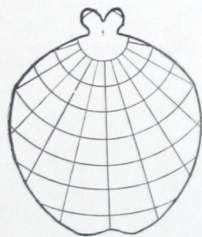
Porcelain Enameled White with Opal Globe



Weatherproof Construction

Photometrically this threaded type Glassteel Diffuser is identical with the Easy Maintenance Safety Type fully described on pages 6 and 7 and is an excellent unit for industrial plant lighting.

From the construction standpoint it is substantial and weather-proof, consisting of socket hood with heavy rolled thread, reflector and diffusing globe.



Distribution Curve

The same distribution of light is obtained with both sizes of Quad Diffuser even though the two lamps listed for the smaller size are of different filament length. The socket used for 150- and 200-watt lamps may be adjusted vertically to bring the filament of either lamp to the correct focal point. See detail of socket construction on page five.

Standard Threaded Glassteel Diffuser

With Opal Globe

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Globe "C"	Socket	Net Wt., Ea. lbs.	Standard Pkg.
2187	150-200	18	12	10	Adj.-Med.	6½	4
2207M	300-500	20	13½	12	Mogul	8¼	4

With Trutint Globe

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Globe "C"	Socket	Net Wt., Ea. lbs.	Standard Pkg.
3187	150-200	18	12	10	Adj.-Med.	6½	4
3207M	300-500	20	13½	12	Mogul	8¼	4

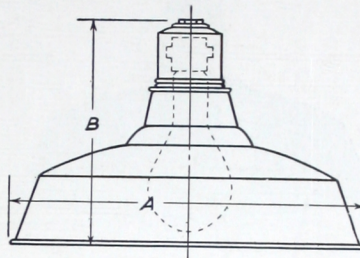
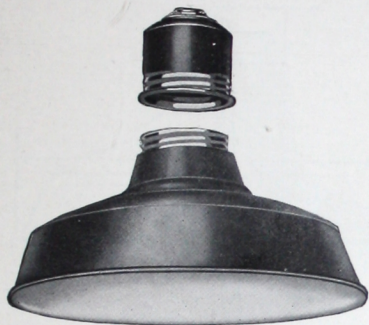
Globes for Replacement

Catalog No.	Watts	Description	Std. Pkg.
101	150-200	Opal Glass 10x6	4
121	300-500	Opal Glass 12x6	4
96	150-200	Trutint (Blue) 10x6	4
98	300-500	Trutint (Blue) 12x6	4

NOTE: For plants or departments where colors must be matched or identified the use of Trutint globes is recommended. Lamps having about one-third more lumen output should be used to maintain lighting intensities obtained with opal globes.

RLM Standard Dome Reflectors

Made of Armco Iron Porcelain Enameled Green Outside, White Inside



Heavy Threaded Dome Reflectors and Socket Hoods

Reflector and Lamp Manufacturers (RLM) Standard

Quadrangle dome reflectors bear the label reproduced above, showing that they are built to Reflector and Lamp Manufacturers (RLM) standard specifications, tested and certified by Electrical Testing Laboratories to be of correct design, high light output and first quality workmanship.

The distribution of light obtained with these reflectors is recognized by lighting authorities as the most satisfactory for uniform general illumination. For recommended ratio of mounting height to spacing distance see table 2, page 3.

The heavy threaded dome reflector with socket hood is made of Armco iron vitreous enameling stock. Unit consists of a substantial hood with beaded bottom flange and coarse rolled thread together with a reflector having a threaded neck of heavy copper.

This two piece construction provides a strong, durable unit, suitable for outdoor use, the parts of which are separable and interchangeable.

Hoods are made in two styles, for conduit stem and for outlet box mounting. Medium base sockets are made in keyless and pull types. The pull socket is provided with a 6 ft. cord and operates from inside the reflector.

The weatherproof top fitting is cast brass tapped for 1/2-inch conduit or for 3/4-inch if specified. Casting has a hex shoulder to keep hood from twisting when reflector is unscrewed.

Catalog No. 73

Heavy Threaded Socket Hood with medium base keyless socket (non-adjustable) for 1/2-inch conduit stem.



Catalog No. 75

Heavy Threaded Socket Hood with medium base keyless socket (non-adjustable) for 4-inch outlet box.



Medium base porcelain chain pull socket (non-adjustable) and 6 ft. cord furnished with Heavy Threaded Hoods, No. 73P and 75P.

With Keyless Socket Hood

1/2-inch Conduit Type

Catalog No.	Lamp Size Watts	Dia. "A"	Depth "B"	Socket	Net. Wt. Lbs. Ea.	Standard Pkg.
1126	100	12	8	Medium	2 3/4	10
1146	150	14	9 1/4	Medium	3	10
1166	200	16	10 1/2	Medium	4 3/8	10
1186M	300-500	18	11 1/2	Mogul	5 3/4	5
1206M	750-1000	20	14 1/4	Mogul	6 3/4	5

Outlet Box Type

Note—In ordering reflectors with keyless socket hoods to fit 4-inch outlet boxes use catalog numbers listed above with the addition of a suffix B, thus: No. 1126B, No. 1206MB, etc.

With Pull Socket Hood

1/2-inch Conduit Type

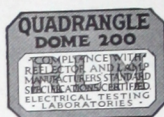
Catalog No.	Lamp Size Watts	Dia. "A"	Depth "B"	Socket	Net. Wt. Lbs. Ea.	Standard Pkg.
1126P	100	12	8	Med. Pull	2 3/4	10
1146P	150	14	9 1/4	Med. Pull	3 3/8	10
1166P	200	16	10 1/2	Med. Pull	4 7/8	10

Outlet Box Type

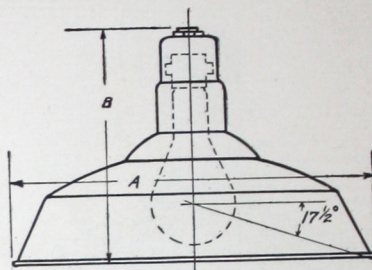
Note—In ordering reflectors with pull socket hoods to fit 4-inch outlet boxes use catalog numbers listed above with the addition of a suffix B, thus: No. 1126PB, No. 1146PB or No. 1166PB.

RLM Standard Dome Reflectors

Made of Armco Iron Porcelain Enameled Green Outside, White Inside



Facsimile of Label



Dome Socket-Reflectors

Reflector and Lamp Manufacturers (RLM) Standard

Quadrangle dome reflectors bear the label reproduced above, showing that they are built to Reflector and Lamp Manufacturers (RLM) standard specifications, tested and certified by Electrical Testing Laboratories to be of correct design, high light output and first quality workmanship.

The distribution of light obtained with these reflectors is recognized by lighting authorities as the most satisfactory for uniform general illumination.

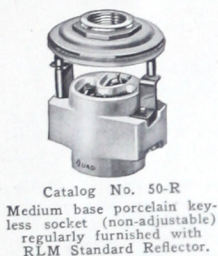
For recommended ratio of mounting height to spacing distance see table 2, page 3.

The dome socket reflector is accurately formed from Armco iron vitreous enameling stock. The neck or socket housing is electric welded to the reflector before enameling providing a one piece construction without exposed seam or bead.

It is porcelain enameled, a reflecting white inside and dark green outside, the inner surface consisting of two opaque white coats laid over the ground coat.

The socket is one piece porcelain, non-adjustable, mounted on brass rods so that it may be removed for wiring simply by loosening two screws that are accessible from inside the reflector.

The weatherproof top fitting is cast brass tapped for 1/2-inch conduit (3/4-inch is specified) and has a hex shoulder to prevent socket's twisting in the reflector. The locknut and offset washer are galvanized.



Catalog No. 50-R

Medium base porcelain keyless socket (non-adjustable) regularly furnished with RLM Standard Reflector.



Catalog No. 51-R

Medium base porcelain chain pull socket (non-adjustable) and 6 ft. cord, furnished with RLM Standard Reflectors.



Catalog No. 35-R

Mogul base one-piece porcelain socket regularly furnished with RLM Standard Reflectors.

With Keyless Socket

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Socket	Net Weight Each Lbs.	Standard Pkg.
111	60	12	7 3/8	Medium	2 1/4	10
112	100	12	8	Medium	2 3/8	10
114	150	14	9 1/4	Medium	2 3/4	10
116	200	16	10 1/2	Medium	4 3/8	10
118M	300-500	18	11 1/2	Mogul	5 1/2	5
120M	750-1000	20	14 1/4	Mogul	6	5

With Pull Socket

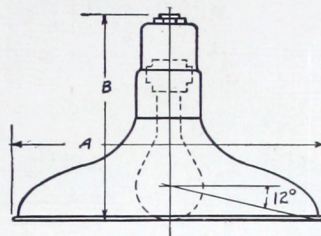
Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Socket	Net Weight Each Lbs.	Standard Pkg.
111P	60	12	7 3/8	Medium	2 1/4	10
112P	100	12	8	Medium	2 3/8	10
114P	150	14	9 1/4	Medium	2 3/4	10
116P	200	16	10 1/2	Medium	4 3/4	10

Sockets for Replacement

Medium Sockets listed on this page are non-adjustable and for replacement in RLM Standard Dome Socket-Reflectors only. Regularly furnished complete with locknut and washers and tapped for 1/2 inch pipe. Furnished for 3/4 inch pipe if specified, at no extra charge.

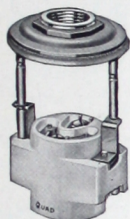
Shallow Bowl Socket Reflectors

Made of Armco Iron Porcelain Enameled Green Outside, White Inside



Shallow Bowl Socket-Reflectors

With Quad Sliding Adjustable Porcelain Sockets



Catalog No. 50
Sliding adjustable medium base porcelain keyless socket regularly furnished with Shallow Bowl Socket-Reflector.

The Quadrangle shallow bowl reflector is designed for general illumination where outlets are spaced at such a distance as to require a slightly wider distribution of light than is obtained with the RLM dome. With this design the edge of the reflector intercepts the direct light at 12 degrees below the horizontal instead of at 17½ degrees as with the dome reflector.

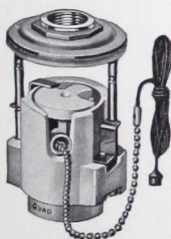
Recommended ratio of mounting height to spacing distance is shown on page 3, table 2.

A careful check is maintained on workmanship and the quality of enamel.

This shallow bowl socket reflector from the standpoint of usefulness and flexibility presents a very decided advantage over other reflectors of this style.

It is equipped with a one-piece porcelain sliding socket that may be adjusted vertically to serve lamps of different filament length. Position of socket may be changed at any time without disturbing the connected wires. Note the regular and alternate lamp sizes listed for each reflector.

Porcelain enameled green outside, white inside. Regularly furnished tapped for ½-inch conduit or with ¾-inch pipe thread if specified.



Catalog No. 51
Sliding adjustable medium base porcelain pull socket and 6-ft. cord furnished with Shallow Bowl Socket-Reflector.

With Keyless Socket

Catalog No.	Size of Lamp Socket Adjustment		Dia. "A"	Depth "B"	Socket	Net Wt. Ea. Lbs.	Std. Pkg
	Up	Down					
312	100	25-60	12	7	Adj. Med.	2	10
314	150	100	14	8	Adj. Med.	2½	10
316	200	150	16	9¼	Adj. Med.	3	10

With Pull Socket

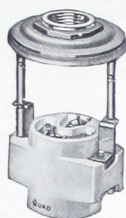
Catalog No.	Size of Lamp Socket Adjustment		Dia. "A"	Depth "B"	Socket	Net Wt. Ea. Lbs.	Std. Pkg.
	Up	Down					
312 P	100	25-60	12	7	Adj. Med.	2½	10
314 P	150	100	14	8	Adj. Med.	2¾	10
316 P	200	150	16	9¼	Adj. Med.	3¾	10



Catalog No. 66
Outlet box cover for mounting Socket-Reflector close to outlet. Made of 14 ga. steel finished in black baked enamel. Offset and punched to fit 4-inch box.

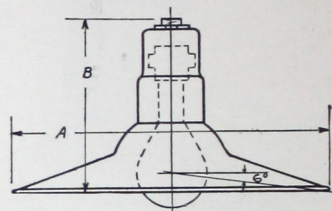
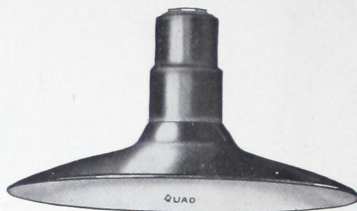
Flat Cone Socket Reflectors

Made of Armco Iron Porcelain Enameled Green Outside, White Inside



Catalog No. 50

Sliding Adjustable medium base porcelain keyless socket regularly furnished with Flat Cone Socket-Reflector.



Flat Cone Socket-Reflectors

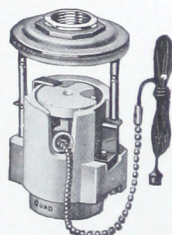
With Quad Sliding Adjustable Porcelain Sockets

The flat cone is especially adapted to the general illumination of yard and roadway and other areas where wide light distribution is desirable. The cut-off angle is 6 degrees from horizontal. See table 2 on page 3 for mounting and spacing data.

This unit like all other Quad socket reflectors (except RLM dome) has a sliding adjustable socket that permits the use of two sizes of lamps. For example, reflector No. 416 takes a 150 watt lamp when socket is set to the upper position and a 100 watt when socket is set in lower position. See page 5. Mogul socket is one-piece, non-adjustable.

Porcelain enameled green outside, white inside.

Regularly furnished with cast brass fitting for 1/2-inch pipe or for 3/4-inch if specified.



Catalog No. 51

Sliding Adjustable medium base porcelain pull socket and 6 ft. cord furnished with Flat Cone Socket-Reflector.



Catalog No. 35R

Mogul base one-piece porcelain socket regularly furnished with Flat Cone Socket-Reflector.

With Keyless Socket

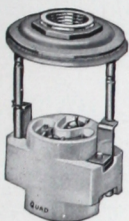
Catalog No.	Size of Lamp Socket Adjustment		Dia. "A"	Depth "B"	Socket	Net Wt. Ea. Lbs.	Std. Pkg.
	Up	Down					
414	100	25-60	14	6 1/4	Adj. Med.	2 5/8	10
416	150	100	16	7 5/8	Adj. Med.	2 7/8	10
418		200	18	9 5/8	Adj. Med.	3 5/8	5
418M	300-500		18	9 5/8	Mogul	3 3/4	5

With Pull Socket

Catalog No.	Size of Lamp Socket Adjustment		Dia. "A"	Depth "B"	Socket	Net Wt. Ea. Lbs.	Std. Pkg.
	Up	Down					
414 P	100	25-60	14	6 1/4	Adj. Med.	2 3/4	10
416 P	150	100	16	7 5/8	Adj. Med.	3	10
418 P		200	18	9 5/8	Adj. Med.	3 3/4	5

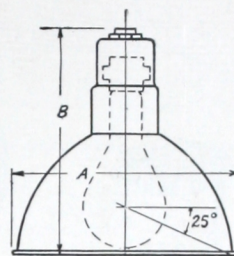
Deep Bowl Socket Reflectors

Made of Armco Iron Porcelain Enameled Green Outside, White Inside



Catalog No. 50

Sliding Adjustable medium base porcelain keyless socket regularly furnished with Deep Bowl Socket-Reflector.



Deep Bowl Socket-Reflectors

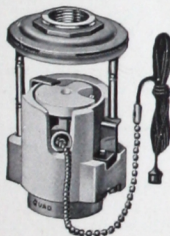
With Quad Sliding Adjustable Porcelain Sockets

Deep bowls are largely used for localized lighting or for high mounting as above a crane. The edge of the Quad deep bowl reflector cuts off the direct light at 25 degrees below the horizontal. For mounting height and spacing distance, see table 2, page 3.

In the deep bowl socket reflector the Quad sliding adjustable socket is particularly useful because it not only serves two sizes of lamp in the same reflector but by raising or lowering the socket two different distributions of light may be obtained with the same lamp. For example, reflector No. 210 with a 150 watt lamp and with the socket set in the upper position delivers a more concentrated light than with the same lamp when socket is lowered. Complete description of socket on page 5.

Porcelain enameled green outside, white inside.

Regularly furnished with brass fitting for 1/2-inch pipe or for 3/4-inch if specified.



Catalog No. 51

Sliding Adjustable medium base porcelain pull socket and 6 ft. cord furnished with Deep Bowl Socket-Reflector.



Catalog No. 35R

Mogul base one-piece porcelain socket regularly furnished with Deep Bowl Socket-Reflector.

With Keyless Socket

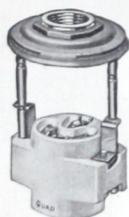
Catalog No.	Size of Lamp Socket Adjustment		Dia. "A"	Depth "B"	Socket	Net Wt. Ea. Lbs.	Std. Pkg.
	Up	Down					
207	100	25-60	7	7 1/2	Adj. Med.	1 1/2	10
208	150	100	8	8 1/2	Adj. Med.	1 3/4	10
210	200	150	10	9 3/4	Adj. Med.	2 3/8	10
212M	300-500		12	11 1/4	Mogul	3 1/4	5

With Pull Socket

Catalog No.	Size of Lamp Socket Adjustment		Dia. "A"	Depth "B"	Socket	Net Wt. Ea. Lbs.	Std. Pkg.
	Up	Down					
207 P	100	25-60	7	7 1/2	Adj. Med.	1 1/2	10
208 P	150	100	8	8 1/2	Adj. Med.	1 3/8	10
210 P	200	150	10	9 3/4	Adj. Med.	2 1/2	10

Angle Socket Reflectors

Made of Armco Iron Porcelain Enameled Green Outside, White Inside



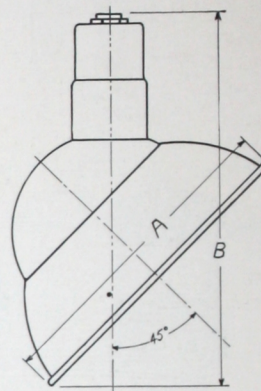
Catalog No. 50
Sliding Adjustable medium
base porcelain keyless socket
regularly furnished with
Angle Socket-Reflector.



Catalog No. 51
Sliding Adjustable medium
base porcelain pull socket
and 6 foot cord furnished
with Angle Socket-Reflector.



Catalog No. 35 R
Mogul base one-piece por-
celain socket regularly fur-
nished with Angle Socket-
Reflector.



Angle Socket-Reflectors

With Quad Sliding Adjustable Porcelain Sockets

This style of reflector is admirably suited to billboard and sign lighting. In practically all installations the portion of a billboard to be lighted by each reflector is higher than it is wide and the circle of light delivered by the round bowl of the Quad angle reflector striking the sign obliquely takes the form of an ellipse which evenly illuminates the desired area without spilling light at the side.

In industrial plants angle reflectors mounted on columns or side walls may be used to illuminate sections that are traveled by a crane or where other conditions render overhead lighting difficult.

Store windows present another class of lighting where a permanent economical and very effective job may be done with porcelain enameled steel angle reflectors.

These 45 degree angles are furnished with a sliding adjustable socket that permits a change of lamp size without necessitating the use of a different reflector. It is sometimes desirable to obtain a different distribution of light on a sign by raising or lowering the socket in the reflector. Mogul socket is non-adjustable.

The neck or socket housing is welded to the reflector in such a way as to avoid an exposed bead or raw edge either inside or outside the reflector.

Porcelain enameled white inside, green outside. Tapped for 1/2-inch pipe or 3/4-inch if specified.

With Keyless Socket

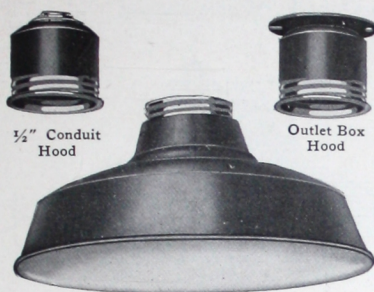
Catalog No.	Size of Lamp Socket Adjustment		Dia. "A"	Depth "B"	Socket	Net Wt. Ea. Lbs.	Std. Pkg.
	Up	Down					
508	60	15-25	8	8 3/4	Adj. Med.	1 1/2	10
510	150	100	10	11 3/4	Adj. Med.	1 7/8	10
512	200	150	12	13 5/8	Adj. Med.	2 1/4	10
514M	300-500		14	15 1/2	Mogul	3 1/4	5

With Pull Socket

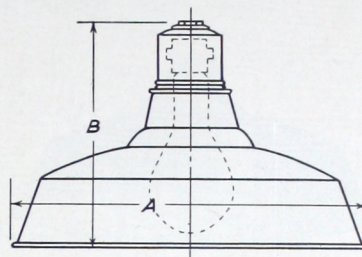
Catalog No.	Size of Lamp Socket Adjustment		Dia. "A"	Depth "B"	Socket	Net Wt. Ea. Lbs.	Std. Pkg.
	Up	Down					
508 P	60	15-25	8	8 3/4	Adj. Med.	1 5/8	10
510 P	150	100	10	11 3/4	Adj. Med.	2	10
512 P	200	150	12	13 5/8	Adj. Med.	2 3/8	10

Jumbo Heavy Threaded Reflectors

Made of Armco Iron Porcelain Enameled Green Outside White Inside



Jumbo
HEAVY
THREADED
REFLECTORS



Medium base pull socket with 6 ft. cord furnished instead of keyless socket if specified.

Heavy Threaded Reflectors and Socket-Hoods

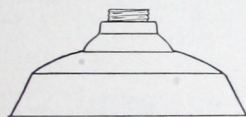
A very serviceable line of Quad Reflectors for industrial lighting. The principal feature of this group is the heavy rolled thread connecting the reflector to the socket-hood.

This construction provides for the easy removal of reflectors for cleaning without disturbing electrical connections. It also permits interchange of reflectors of any size or type.

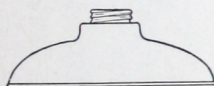
Complete unit consists of hood of either conduit or outlet box type, socket for either mogul or medium base lamps and porcelain enameled reflector.

Reflectors are made of Armco iron porcelain enameled green outside with two white coats inside. A threaded ring of heavy copper is swaged into the reflector for attaching to the hood.

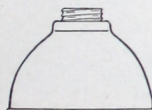
Socket-hoods have heavy rolled thread and bead at lower edge and are finished in green baked enamel. Regularly furnished with keyless sockets and equipped for mounting on 1/2-inch conduit.



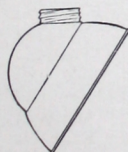
RLM Standard Dome



Shallow Bowl



Deep Bowl



Angle

Reflectors Only

Catalog No.	Dia. "A"
1122	12
1142	14
1162	16
1182	18
1202	20

Reflectors Only

Catalog No.	Dia. "A"
3122	12
3142	14
3162	16
3182	18

Reflectors Only

Catalog No.	Dia. "A"
2082	8
2102	10
2122	12

Reflectors Only

Catalog No.	Dia. "A"
5102	10
5122	12
5142	14

Note: Reflectors listed above may also be used with porcelain enameled socket-hoods, page nine.

Dome Reflectors with Socket-Hoods

Catalog No.	Dia. "A"	Depth "B"	Lamp	Socket	Standard Pkg.
1124	12	8	100W	Medium	10
1144	14	9 1/4	150W	Medium	10
1164	16	10 1/2	200W	Medium	5
1184M	18	11 1/2	300-500W	Mogul	5
1204M	20	14 1/4	750-1000W	Mogul	5

Shallow Bowl Reflectors with Socket-Hoods

Catalog No.	Dia. "A"	Depth "B"	Lamp	Socket	Standard Pkg.
3124	12	6 3/4	60-100W	Adj.-Med.	10
3144	14	7 3/4	100-150W	Adj.-Med.	10
3164	16	8 1/2	150-200W	Adj.-Med.	5
3184M	18	10	300-500W	Mogul	5

Deep Bowl Reflectors with Socket-Hoods

Catalog No.	Dia. "A"	Depth "B"	Lamp	Socket	Standard Pkg.
2084	8	8 1/2	100-150W	Adj.-Med.	10
2104	10	9 3/4	150-200W	Adj.-Med.	5
2124M	12	11 1/4	300-500W	Mogul	5

Angle Reflectors with Socket-Hoods

Catalog No.	Dia. "A"	Depth "B"	Lamp	Socket	Standard Pkg.
5104	10	11 3/4	100-150W	Adj.-Med.	10
5124	12	13 3/8	150-200W	Adj.-Med.	5
5144M	14	15 1/2	300-500W	Mogul	5

Jumbo Socket Hoods

Cat. No.	Description	Std. Pkg.
83	Medium Keyless, 1/2" Conduit type	10
83M	Mogul Keyless, 1/2" Conduit type	10
85	Medium Keyless, 4" Box	10
85M	Mogul Keyless, 4" Box	10

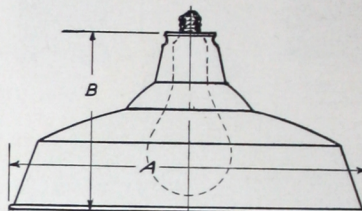


RLM Standard Dome Reflectors

Made of Armco Iron Porcelain Enameled Green Outside, White Inside



Facsimile of
Label



Dome Reflector Fitter Type

Reflector and Lamp Manufacturers (RLM) Standard

Quadrangle dome reflectors bear the label reproduced above, showing that they are built to Reflector and Lamp Manufacturers (RLM) standard specifications, tested and certified by Electrical Testing Laboratories to be of correct design, high light output and first quality workmanship.

The distribution of light obtained with these reflectors is recognized by lighting authorities as the most satisfactory for uniform general illumination.

For recommended ratio of mounting height to spacing distance, see table 2, page 3.

The fitter type dome reflector is so designed that when used with the form "O" 2 1/4-inch shade holder proper light distribution is obtained. The light cut-off angle is 17 1/2 degrees below horizontal as in other RLM reflectors.

Porcelain enameled green outside, white inside.



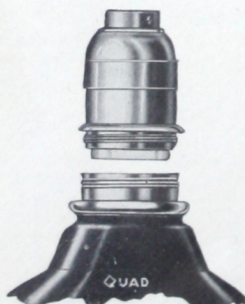
Standard 2 1/4-inch fitter or reflector heel, takes shade holders for either brass shell or porcelain (W. P.) Sockets.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Wt. Ea. Lbs.	Standard Pkg.
1110	60	12	4 7/8	1 3/8	10
1120	100	12	5 1/2	1 1/2	10
1140	150	14	6 3/4	2 7/8	10
1160	200	16	7 3/4	3	10

Dome Reflector Threaded Type

The threaded type reflector is identical with the fitter type above except that it is equipped with a nickel plate copper ring threaded to fit the weather-proof copper or aluminum sockets listed at bottom of this page.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Wt. Ea. Lbs.	Standard Pkg.
1111	60	12	5 3/8	1 3/8	10
1121	100	12	6	1 1/2	10
1141	150	14	7 1/4	2 7/8	10
1161	200	16	8 1/4	3	10



Reflector neck with standard screw thread to fit copper and aluminum weather-proof threaded shell sockets and weather-proof threaded porcelain sockets made by wiring device manufacturers

The socket shown above is not furnished with Quad reflectors. For RLM Dome Socket-Reflectors see page 10.

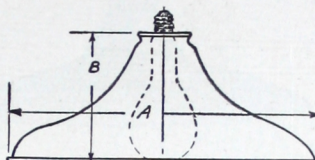
Threaded Sockets

The following is an incomplete listing indicating the many styles and makes of sockets that may be used with Quad threaded type reflectors:

Manufacturer	Cat. No.	Cap	Type	Body
Arrow	8127	1/2-inch	Keyless	Copper
Arrow	8135	1/2-inch	Pull	Aluminum
Bryant	3708	Cord Grip	Keyless	Aluminum
Freeman	851C	3/4-inch	Keyless	Porcelain
Hart & Hegeman	8110	1/2-inch	Keyless	Aluminum

Shallow Bowl Reflectors

Made of Armco Iron Porcelain Enameled Green Outside, White Inside



Shallow Bowl Reflector Fitter Type

The Quadrangle shallow bowl reflector is designed for general illumination where outlets are spaced at such a distance as to require a slightly wider distribution of light than is obtained with the RLM dome. With this design the edge of the reflector intercepts the direct light at 12 degrees below the horizontal instead of at 17½ degrees as with the dome reflector.

Recommended ratio of mounting height to spacing distance is shown on page 3, Table 2.

A careful check is maintained on workmanship and the quality of enamel.

When used with the form "O" 2¼-inch shade holder and lamp of size indicated the same distribution of light will be obtained as with the socket reflector of this style.

Porcelain enameled green outside, white inside.



Standard 2¼-inch fitter or reflector heel, takes shade holders for either brass shell or porcelain (W.P.) sockets.



Reflector neck with standard screw thread to fit copper and aluminum weather-proof threaded shell sockets and weather-proof threaded porcelain sockets made by wiring device manufacturers.

The socket shown above is not furnished with Quad reflectors. For Shallow Bowl Socket-Reflectors see page 11.

For threaded sockets see footnote page 16.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Wt. Ea. Lbs.	Standard Pkg.
3100	25-60	10	4	1½	10
3120	100	12	4¾	1½	10
3140	150	14	5¾	1¾	10
3160	200	16	6¾	2¾	10

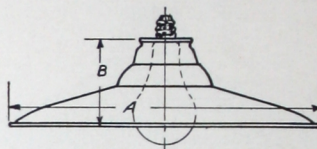
Shallow Bowl Reflector Threaded Type

The threaded type reflector is identical with the fitter type except that it is equipped with a nickel plated copper ring to fit sockets listed on page 16.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Wt. Ea. Lbs.	Standard Pkg.
3101	25-60	10	4½	1½	10
3121	100	12	5¼	1½	10
3141	150	14	6¼	1¾	10
3161	200	16	7¾	2¾	10

Flat Cone Reflectors

Made of Armco Iron Porcelain Enameled Green Outside, White Inside



Flat Cone Reflector Fitter Type

The flat cone is especially adapted to the general illumination of broad areas or interiors where wide light distribution is desirable. Also for lighting bins, shelves and other vertical surfaces. The cut-off angle is 6 degrees below horizontal. See Table 2 on page 3 for mounting and spacing data.



Standard 2¼-inch fitter or reflector heel, takes shade holders for either brass shell or porcelain (W. P.) sockets.

Designed for use with standard 2¼ inch shade holder. Light cut-off 6 degrees below horizontal with form "O" holder.

Porcelain enameled green outside, white inside.



Reflector neck with standard screw thread to fit copper and aluminum weather-proof threaded shell sockets and weather-proof threaded porcelain sockets made by wiring device manufacturers.

The socket shown above is not furnished with Quad reflectors. For Flat Cone Socket Reflectors see page 12.

For threaded sockets see footnote page 16.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Wt. Ea. Lbs.	Standard Pkg.
4120	25-60	12	3¾	1¼	10
4140	100-150	14	4	1½	10
4160	200	16	6	2½	10

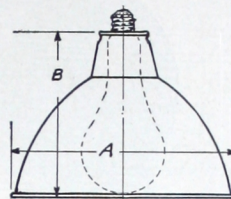
Flat Cone Reflector Threaded Type

These reflectors are just like the fitter type above with the addition of a threaded nickel plated copper ring securely clinched over the heel or fitter. This ring fits the weatherproof aluminum or copper shell sockets made by wiring device manufacturers.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Wt. Ea. Lbs.	Standard Pkg.
4121	25-60	12	3¾	1¼	10
4141	100-150	14	4½	1½	10
4161	200	16	6½	2½	10

Deep Bowl Reflectors

Made of Armco Iron Porcelain Enameled Green Outside, White Inside



Deep Bowl Reflector Fitter Type



Standard 2¼-inch fitter or reflector heel, takes shade holders for either brass shell or porcelain (W. P.) sockets.

Deep bowls are largely used for localized lighting or for high mounting as above a crane. The edge of the Quad deep bowl reflector cuts off the direct light at 25 degrees below the horizontal. For mounting height and spacing distance, see Table 2, page 3.

Designed for use with standard 2¼-inch shade holder.

Porcelain enameled green outside, white inside.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Wt. Ea. Lbs.	Standard Pkg.
2070	60-100	7	4⅞	¾	10
2080	150	8	6	1	10
2100	200	10	7⅞	1½	10



Reflector neck with standard screw thread to fit copper and aluminum weather-proof threaded shell sockets and weather-proof threaded porcelain sockets made by wiring device manufacturers.

Deep Bowl Reflector Threaded Type

These reflectors are like the fitter type above, with the addition of a threaded ring securely clinched over the heel or fitter. This ring fits the weatherproof aluminum or copper shell sockets made by wiring device manufacturers.

The socket shown above is not furnished with Quad reflectors.

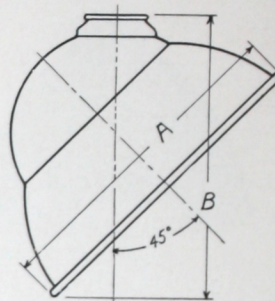
For Deep Bowl Socket Reflectors see page 13.

For threaded sockets see footnote page 16.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Wt. Ea. Lbs.	Standard Pkg.
2071	60-100	7	5⅜	¾	10
2081	150	8	6½	1	10
2101	200	10	7⅞	1½	10

Angle Reflectors

Made of Armco Iron Porcelain Enameled Green Outside, White Inside



Standard 2 1/4-inch fitter or reflector heel, takes shade holders for either brass shell or porcelain (W. P.) sockets.



Reflector neck with standard screw thread to fit copper and aluminum weather-proof threaded shell sockets and weather-proof threaded porcelain sockets made by wiring device manufacturers.

The socket shown above is not furnished with Quad reflectors. For Angle Socket Reflectors, see page 14.

For threaded sockets see foot note page 16.

Angle Reflector Fitter Type

This style of reflector when used with weather-proof sockets is suitable for billboard and sign lighting. In practically all installations the portion of a billboard to be lighted by each reflector is higher than it is wide and the circle of light delivered by the round bowl of the Quad angle reflector striking the sign obliquely takes the form of an ellipse which evenly illuminates the desired area without spilling light at the side.

In industrial plants angle reflectors mounted on columns or side walls may be used to illuminate sections that are traveled by a crane or where other conditions render overhead lighting difficult.

Store windows present another class of lighting where a permanent, economical and very effective job may be done with porcelain enameled steel angle reflectors.

Designed for use with standard 2 1/4-inch shade holder. The axis of light distribution is 45 degrees.

Porcelain enameled green outside, white inside.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Wt. Ea. Lbs.	Standard Pkg.
5080	60	8	7	3/4	10
5100	100	10	8 1/4	1	10
5120	150	12	9 3/4	1 3/4	10
5140	200	14	11 3/4	2 1/2	10

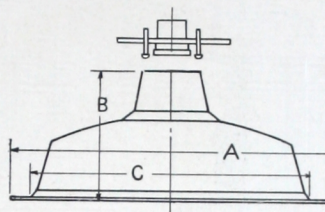
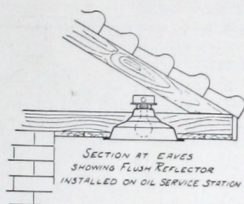
Angle Reflector Threaded Type

These reflectors are like the fitter type above, with the addition of a threaded copper ring securely clinched over the heel or fitter. This ring fits the weatherproof aluminum or copper shell sockets made by wiring device manufacturers.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Wt. Ea. Lbs.	Standard Pkg.
5081	60	8	6 1/2	3/4	10
5101	100	10	8 1/4	1	10
5121	150	12	10 1/4	1 3/4	10
5141	200	14	12 3/4	2 1/2	10

Outlet Box Reflectors

Porcelain Enameled Green Outside, White Inside



Flanged Reflector for Flush Mounting

This reflector was designed especially for the illumination of gasoline filling stations but is also admirably suited to tunnel and subway work or any location where headroom is limited. The lower edge of the reflector is turned outward forming a flange one inch wide to conceal the irregular edge of the opening into which the reflector is set.

The receptacle cover is drilled and tapped for two long adjusting screws the heads of which project through two keyholes in the top of the reflector.

Fits 4-inch box (furnished for 3-inch if specified), porcelain enameled green outside, white inside.



Flanged Reflector

Catalog No.	Lamp Size Watts	Dia. Over Flange "A"	Depth "B"	Max.* Mounting	Opening Req. "C"	Standard Pkg.
2000	60-100w	14	5¼	6	12½	10
4000	150w	16	6½	7¼	14½	10
6000	200w	18	7¾	8½	16½	10

* This figure is the maximum mounting distance from ceiling line to face of Receptacle cover.

Without Flange

This reflector is identical with the style shown above except that the lower edge terminates in a rolled bead instead of a one-inch flange.

Recommended for close mounting work requiring medium base lamps.



Outlet Box Reflector without Flange

Catalog No.	Lamp Size Watts	Diameter "C"	Depth "B"	Standard Pkg.
2012	60-100w	12	5¼	10
4014	150w	14	6½	10
6016	200w	16	7¾	10

Note—On special order pull sockets instead of keyless receptacles will be furnished.

Shallow Bowl Reflectors

Porcelain Enameled Green Outside, White Inside

A practical line of reflectors produced to meet an insistent demand for factory lighting equipment at lower prices.

The various sizes listed below are made only in the heel or fitter type and are not intended for lamps larger than 200 watts.

Sold only in Standard Packages.



BH Shallow Bowl Reflector

Catalog No.	Diameter	Shipping Wt. Std. Pkg.	Standard Pkg.
BH10	2¼x10 in.	10 lbs.	10
BH12	2¼x12 in.	16 lbs.	10
BH14	2¼x14 in.	20 lbs.	10
BH16	2¼x16 in.	28 lbs.	10



Rectangular Reflectors And QD Socket Fittings

For Signs and General Lighting Service



Catalog No. 5035MH
QD Mogul Socket Reflector Rectangular Opening
12 1/2 x 13 inches



Typical Installation Using No. 5005H
A Small Wide Angle Reflector 6 1/2 x 8 inches for
Long Narrow Signs

In developing the accompanying table reflectors were set up as in actual use and tested for intensity and uniformity of light distribution so that the recommendations made are practical and reliable. The wide spread of light obtained with these reflectors makes possible considerable variation in spacing and the maximum dimensions with larger lamps will prove satisfactory.

This type of reflector made in sizes from 50 watt to 500 watt is suitable for a wide variety of uses, the most important being outdoor advertising, automobile service stations, night athletics and industrial lighting.

Any QD socket-fittings whether of horizontal, vertical or outlet box types with keyless or pull sockets will fit these reflectors. Such flexibility of combination adds greatly to their wide range of uses and makes large stocks of reflectors unnecessary.

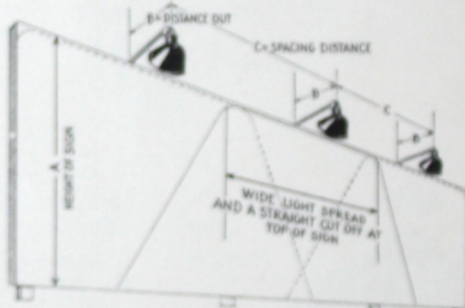


Reversible!

Socket-fittings may be reversed to throw light outward as in an automobile wash rack or for "flood-lighting" outdoor areas.



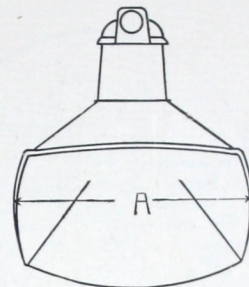
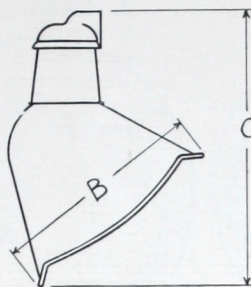
Mounting and Spacing Data



A Height of Sign Feet	B Dist. Out Feet	C Recommended Spacing Feet	Equip. Watts	Ref.	Maximum Spacing (Using Larger Lamps) Equip.		
					Feet	Watts	Ref.
2	1'3"	2'	60	5005H	2'6"	60	5005H
			100	5015H		100	5015H
3 to 5	2	4	60	5005H	4'6"	100	5015H
			100	5015H		150	5025H
5 to 7	3	5	100	5015H	6	150	5025H
			150	5015H			
7 to 9	4	6	100	5015H	8	200	5025H
			150	5015H			
9 to 11	5	7'6"	150	5015H	10	200	5025H
			200	5025H			
11 to 13	6	9	150	5015H	12	300	5035MH
			200	5025H			
13 to 16	7	10	200	5025H	13'6"	300	5035MH
			300	5035MH		500	5035MH
16 to 20	8'6"	12	300	5035MH	16	500	5035MH
			500				

QD Rectangular Reflectors and Fittings

Porcelain Enameled Green Outside, White Inside



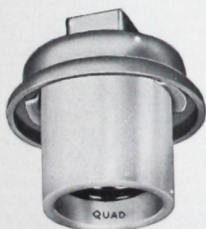
Quick Detachable and Interchangeable

Rectangular angle reflectors are especially suited to the lighting of side walls, bulletin boards and other vertical areas of wide proportions. The contour is such that a straight line cutoff of light at top of area is obtained.

In industrial plants these reflectors are easily mounted on columns or side walls to illuminate sections that are traveled by cranes or where other conditions make overhead lighting difficult.

Horizontal Type H

For sign lighting the horizontal type is used with socket fitting attached as shown above. For use in industrial plants or automobile washracks fittings may be reversed as illustrated on opposite page. Casting is cadmium plated and of weather-proof construction. Tapped at side for $\frac{1}{2}$ inch conduit or for $\frac{3}{4}$ inch on special order.



Catalog No.	Size of Lamp Watts	Diameter "A" "B"	Depth "C"	Socket	Net Wt., Ea., lbs.	Standard Pkg.
5005H	50-60	6½ x 8	8¾"	Medium	1¾	10
5015H	100-150	8½ x 10	11¾"	Medium	2¾	10
5025H	200	8½ x 10	11¾"	Medium	2¾	10
5035MH	300-500	12¾ x 15	15¾"	Mogul	3¾	5

Vertical Type V

With the vertical socket fitting reflectors may be suspended from above as in usual construction. Cadmium plated casting is tapped at top for $\frac{1}{2}$ inch conduit.



Catalog No.	Size of Lamp Watts	Diameter "A" "B"	Depth "C"	Socket	Net Wt., Ea., lbs.	Standard Pkg.
5005V	50-60	6½ x 8	8¾"	Medium	1¾	10
5015V	100-150	8½ x 10	11¾"	Medium	2¾	10
5025V	200	8½ x 10	11¾"	Medium	2¾	10
5035MV	300-500	12¾ x 15	15¾"	Mogul	3¾	5

Outlet Box Type B

This type is made only in medium socket sizes and consists of a Keyless receptacle and a $\frac{4}{16}$ inch round 14 gauge cover, cadmium plated, and perforated to fit both 3" and 4" boxes.

Catalog No.	Size of Lamp Watts	Diameter "A" "B"	Depth "C"	Socket	Net Wt., Ea., lbs.	Standard Pkg.
5005B	50-60	6½ x 8	7½"	Medium	1¾	10
5015B	100-150	8½ x 10	10¾"	Medium	1¾	10
5025B	200	8½ x 10	10¾"	Medium	1¾	10

Pull Socket Reflector

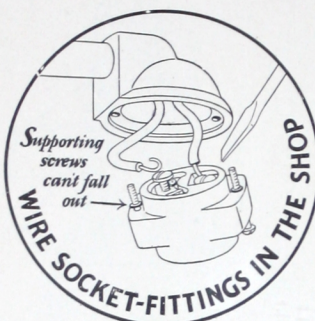
All reflectors on this page except Nos. 5035MH and 5035MV can be furnished with pull sockets. Catalog number and other data are as above but with the letter P (for pull socket) inserted. Thus, No. 5005PH, indicates reflector with pull socket and horizontal fitting, and No. 5005PV indicates pull socket reflector and vertical type fitting.

Type MV
Mogul Socket
Vertical type fitting. With
reflector neck below showing
QD feature.

QD Angle Reflectors and Fittings

For Sign and Billboard Lighting

U. S. Patent No. 1,764,997



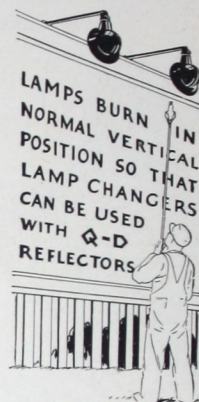
Easy to Wire

Attach wires and enter supporting screws into holes tapped in cast fitting.



Easy to Install

Pass reflectors up over lamp receptacle—a quarter turn to the right and tighten supporting screws.



Easy to Maintain

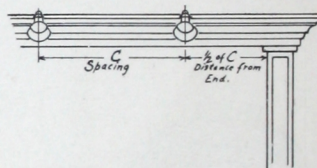
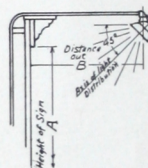
Reflectors can be removed for cleaning or for replacement without disturbing electrical connections.

Suggestions for Mounting QD Angle Reflectors

No hard and fast rules can be laid down for the installation of sign lighting equipment. The following suggestions are the result of experiments conducted by the manufacturer and are intended only to serve as a guide.

The experienced sign man will be able to vary somewhat from the data given here, but in laying out a job care should be taken not to exceed the maximum spacing distance "C" by more than a few inches. More "punch" can be put into sign lighting by closer spacing.

Reflector and lamp sizes given on this page will provide illumination of proper intensity for ordinary city and suburban conditions. If sign is located in brightly lighted district, larger lamps or closer spacing should be used to make sign effective.



Sign Lighting Data

A	B	C	Reflector	Lamp
Approx. Height of Sign	Distance	Maximum Spacing	Cat. No. Dia.	Size
3'	2'-0"	4'-6"	606H 6"	60W
5'	3'-0"	5'-0"	608H 8"	100W
8'	4'-0"	6'-6"	610H 10"	150W
12'	5'-0"	8'-0"	610H 10"	150W
			612H 12"	200W
15'	7'-0"	11'-0"	612H 12"	200W
18'	8'-0"	13'-0"	614MH 14"	300W
			614MH 14"	500W

Note: Distance from end reflector to end of sign should be approximately one-half of spacing distance.

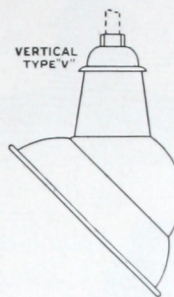
The Ideal Reflector for Target Type Signs

Q-D Reflectors have served satisfactorily on thousands of signs of all shapes—round, square, rectangular, oval, triangular, shell shaped and others of irregular outline.



Q D Angle Reflectors and Fittings

Porcelain Enameled Green Outside, White Inside

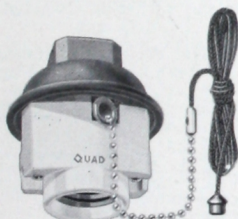


Quick Detachable and Interchangeable

These forty-five degree angle reflectors are suitable for outdoor as well as indoor use. Construction is strong, simple and weatherproof. They are very easy to wire and reflectors may be removed for cleaning without disturbing electrical connections. The various types of fittings and different sizes of reflectors are interchangeable.

Horizontal Type "H"

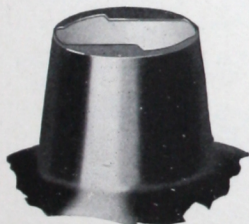
No goosenecks or pipe elbows are needed with type "H" reflectors. Socket fitting is cast iron cadmium plated, threaded at side for $\frac{1}{2}$ -inch conduit. Reflectors may be reversed on the fittings to throw light outward as for automobile wash racks.



Catalog No.	Lamp Size Watts	Reflector Dia.	Reflector Depth	Net Wt. Ea. Lbs.	Standard Package
605H	15-40	6	7½	1½	10
606H	50-60	6	8¼	1¾	10
608H	100	8	10	1¾	10
610H	150	10	11½	2	10
612H	200	12	13½	2½	10
614MH	300-500	14	16½	3¾	5

Vertical Type "V"

With the vertical socket-fitting Q D Angle Reflectors may be suspended from above as in usual construction. Fitting is cast iron cadmium plated, threaded for $\frac{1}{2}$ -inch conduit.



Catalog No.	Lamp Size Watts	Reflector Dia.	Reflector Depth	Net Wt. Ea. Lbs.	Standard Package
605V	15-40	6	7½	1½	10
606V	50-60	6	8¼	1¾	10
608V	100	8	10	1¾	10
610V	150	10	11½	2	10
612V	200	12	13½	2½	10
614MV	300-500	14	16½	3¾	5

Outlet Box Type "B"

Cover is of No. 14 U. S. gauge iron, $\frac{1}{4}$ -inch diameter, cadmium plated and punched to fit 3 and 4-inch round or octagonal boxes.

Catalog No.	Lamp Size Watts	Reflector Dia.	Reflector Depth	Net Wt. Ea. Lbs.	Standard Package
605B	15-40	6	7½	1¼	10
606B	50-60	6	8¼	1¾	10
608B	100	8	10	1½	10
610B	200	10	11½	1¾	10
612B	300-500	12	13½	2¼	10

Quick Detachable!

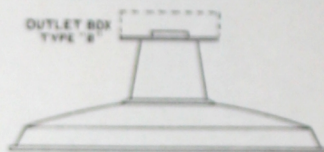
The ease and speed with which these reflectors may be removed, cleaned and replaced is an important feature—hence the name "Q-D."

Pull Socket

Above—Type "PV" pull socket fitting with 6 ft. cord furnished instead of Keyless fitting if specified. Horizontal and Outlet Box types are also made with pull sockets.

Q D Shallow Bowl Reflectors and Fittings

Porcelain Enameled Green Outside, White Inside



Economy and Utility

The shallow bowl reflectors and socket-fittings shown on this page provide a general purpose line that is both practical and economical. Cast iron fittings are weatherproof so that reflector may be readily adapted to a variety of uses both outdoors and indoors. The three types of fittings shown are identical with those used on angle reflectors listed on opposite page. All sizes of shallow bowl and angle reflectors may be interchanged without disturbing electrical connections.

Vertical Type "V"

With the vertical socket-fitting the Q D Shallow Bowl Reflector is readily adapted to the ordinary forms of reflector installation. The galvanized iron fitting that partly houses the socket is threaded at the top for 1/2-inch conduit.



Type "V"

Weather-proof socket fitting of cast iron cadmium plated and threaded at top for 1/2-inch conduit. Takes any QD reflector.

Catalog No.	Reflector Dia.	Socket Fitting Type	Net Weight Each Lbs.	Standard Pkg.
10 V	10	V	1 1/4	10
12 V	12	V	2	10
14 V	14	V	2 1/4	10
16 V	16	V	3 1/4	10

Horizontal Type "H"

For the lighting of building exteriors, arcways, etc., the horizontal type is particularly useful. Reflectors may be attached to the projecting end of 1/2-inch conduit without the use of gooseneck or outlet box.

Socket fitting is cast iron, galvanized, threaded at side for 1/2-inch conduit.



Type "H"

Weather-proof socket fitting of cast iron cadmium plated and threaded at side for 1/2-inch conduit. Takes any QD reflector.

Catalog No.	Reflector Dia.	Socket Fitting Type	Net Weight Each Lbs.	Standard Pkg.
10 H	10	H	1 1/4	10
12 H	12	H	2	10
14 H	14	H	2 1/4	10
16 H	16	H	3 1/4	10

Outlet Box Type "B"

In garage and factory installations, reflectors often must be mounted as close to the ceiling as possible. For this purpose the outlet box type reflector is much more practical and no more expensive than ordinary shade-holder construction. Type B socket-fitting consists of a 4 1/2-inch diameter round cover of No. 14 U. S. gauge cadmium plated and punched to fit 3 and 4-inch outlet boxes.



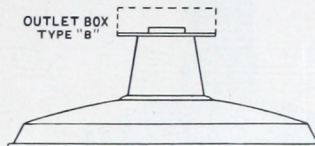
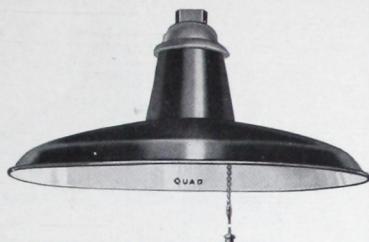
Type "B"

Outlet box cover and socket to fit 3 and 4-inch boxes, cadmium plated. Takes any QD reflector.

Catalog No.	Reflector Dia.	Socket Fitting Type	Net. Wt. Ea. Lbs.	Standard Pkg.
10 B	10	B	1 1/4	10
12 B	12	B	1 1/4	10
14 B	14	B	2 1/4	10
16 B	16	B	3	10

QD Shallow Bowl Reflectors And Pull Socket Fittings

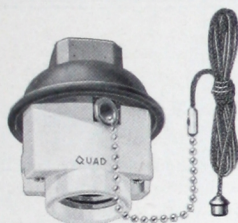
Porcelain Enameled Green Outside, White Inside



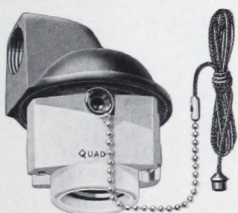
Reflector and Pull Socket

These shallow bowl reflectors are the same as those shown on opposite page except that sockets have a pull mechanism. A bead chain extends well below hot lamp bulb to avoid scorching the 6 ft. pull cord. The pull mechanism used is subjected to a severe test to insure satisfactory operation over a long period of time.

All fittings are cadmium plated and castings are threaded for $\frac{1}{2}$ inch pipe. Type PH fittings furnished for $\frac{3}{4}$ inch pipe if specified. Type PB fittings have holes to fit both 3 inch and 4 inch outlet boxes.



Type PV
Medium Pull Socket Fitting



Type PH
Medium Pull Socket Fitting



Type PB
Medium Pull Socket Fitting

Reflector with PV Socket-Fitting

Catalog No.	Lamp Size Watts	Dia.	Depth	Net Weight, Each, Lbs.	Standard Pkg.
10PV	60	10	5 $\frac{3}{8}$ "	1 $\frac{3}{4}$	10
12PV	100	12	6"	2	10
14PV	150	14	7"	2 $\frac{1}{2}$	10
16PV	200	16	7 $\frac{1}{2}$ "	3 $\frac{1}{2}$	10

Reflector with PH Socket-Fitting

Catalog No.	Lamp Size Watts	Dia.	Depth	Net Weight, Each, Lbs.	Standard Pkg.
10PH	60	10	5 $\frac{3}{8}$ "	1 $\frac{3}{4}$	10
12PH	100	12	6"	2	10
14PH	150	14	7"	2 $\frac{1}{2}$	10
16PH	200	16	7 $\frac{1}{2}$ "	3 $\frac{1}{2}$	10

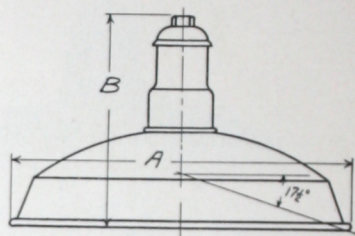
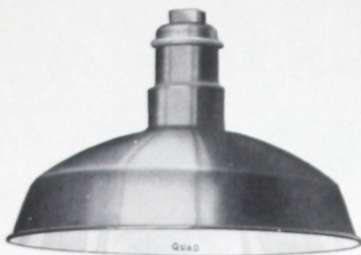
Reflector with PB Socket-Fitting

Catalog No.	Lamp Size Watts	Dia.	Depth	Net Weight, Each, Lbs.	Standard Pkg.
10PB	60	10	4"	1 $\frac{1}{4}$	10
12PB	100	12	4 $\frac{1}{4}$ "	1 $\frac{1}{2}$	10
14PB	150	14	5 $\frac{1}{2}$ "	2	10
16PB	200	16	6"	3	10



Special Dome Reflectors With QD Socket Fittings

Porcelain Enameled Green Outside, White Inside



Reflector and Keyless Socket

These special dome reflectors, combined with three types of socket fittings, provide a practical line of lighting equipment for indoor or outdoor use.

Intensive lighting in industrial plants may be obtained by closer spacing of reflectors designed to concentrate light below. With the Q-D dome this is accomplished most economically.

Construction is strong, simple and weatherproof. Sockets are easy to wire and reflectors may be attached or removed without disturbing the wiring. All fittings are cadmium plated with one-piece medium or mogul sockets, regularly furnished tapped for 1/2 inch pipe. Type H fittings furnished for 3/4 inch if specified.



Type H

QD Medium Socket Fitting



Type B

QD Medium Socket Fitting



Type MH

QD Mogul Socket Fitting

Dome Reflector with V Socket-Fitting

Catalog No.	Lamp Size Watts	Dia. "A"	Depth "B"	Socket	Net Weight Each, Lbs.	Standard Pkg.
8125V	100	12	7 1/2"	Medium	2 1/2	10
8145V	150	14	9"	Medium	3	10
8165V	200	16	10"	Medium	4	10
8185MV	300-500	18	12"	Mogul	5	5

Dome Reflector with H Socket-Fitting

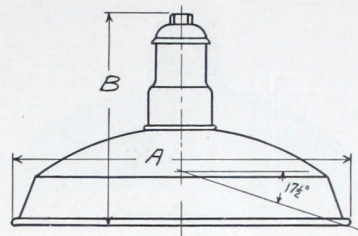
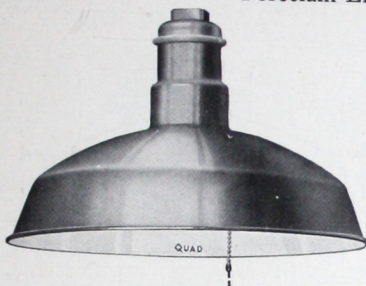
Catalog No.	Lamp Size Watts	Dia. "A"	Depth "B"	Net Weight Each, Lbs.	Standard Pkg.
8125H	100	12	7 1/2"	2 1/2	10
8145H	150	14	9"	3	10
8165H	200	16	10"	4	10
8185MH	300-500	18	12"	5	5

Dome Reflector with B Socket-Fitting

Catalog No.	Lamp Size Watts	Dia. "A"	Depth "B"	Net Weight Each, Lbs.	Standard Pkg.
8125B	100	12	6 1/4"	2 1/4	10
8145B	150	14	7 1/2"	2 1/2	10
8165B	200	16	8 1/2"	3 1/2	10

Special Dome Reflectors With QD Pull Socket Fittings

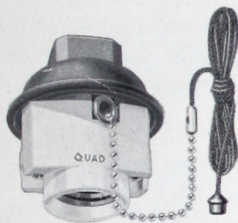
Porcelain Enameled Green Outside, White Inside



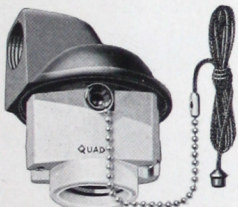
Reflector and Pull Socket

These special dome reflectors are the same as those shown on opposite page except that sockets have a pull mechanism. A bead chain extends well below hot lamp bulb to avoid scorching the 6 ft. pull cord. The pull mechanism used is subjected to a severe test to insure satisfactory operation over a long period of time.

All fittings are cadmium plated and castings are threaded for $\frac{1}{2}$ inch pipe. Type PH fittings furnished for $\frac{3}{4}$ inch pipe if specified. Type PB fittings have holes to fit both 3 inch and 4 inch outlet boxes.



Type PV
Medium Pull Socket Fitting



Type PH
Medium Pull Socket Fitting



Type PB
Medium Pull Socket Fitting

Dome Reflector with PV Socket Fitting

Catalog No.	Lamp Size Watts	Dia. "A"	Depth "B"	Socket	Net Weight, Ea., Lbs.	Standard Pkg.
8125PV	100	12	7 $\frac{1}{2}$ "	Medium	2 $\frac{1}{2}$	10
8145PV	150	14	9"	Medium	3	10
8165PV	200	16	10"	Medium	4	10

Dome Reflector with PH Socket Fitting

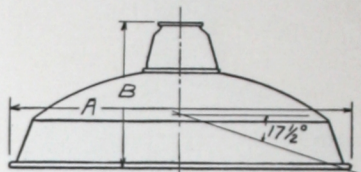
Catalog No.	Lamp Size Watts	Dia. "A"	Depth "B"	Socket	Net Weight, Ea., Lbs.	Standard Pkg.
8125PH	100	12	7 $\frac{1}{2}$ "	Medium	2 $\frac{1}{2}$	10
8145PH	150	14	9"	Medium	3	10
8165PH	200	16	10"	Medium	4	10

Dome Reflector with PB Socket Fitting

Catalog No.	Lamp Size Watts	Dia. "A"	Depth "B"	Socket	Net Weight, Ea., Lbs.	Standard Pkg.
8125PB	100	12	6 $\frac{1}{4}$ "	Medium	2 $\frac{1}{4}$	10
8145PB	150	14	7 $\frac{1}{2}$ "	Medium	2 $\frac{1}{2}$	10
8165PB	200	16	8 $\frac{1}{2}$ "	Medium	3 $\frac{1}{2}$	10

Special Dome Reflectors

Porcelain Enameled Green Outside, White Inside



Special Dome Reflector Fitter Type

Intensive lighting in industrial plants may be obtained by closer spacing of reflectors designed to concentrate light below. With these special dome reflectors suspended on drop cords, this is accomplished most economically.



Standard 2 1/4 inch fitter or reflector heel, takes shade holders for either brass shell or porcelain (W. P.) sockets

The lower edge of this reflector intercepts the direct light from the lamp filament at $17\frac{1}{2}$ degrees below horizontal, thus providing proper shielding to comply with usual regulations in regard to factory lighting.

Made from best grade enameling iron, finished in vitreous enamel green outside, reflecting white inside.



Reflector neck with standard screw thread to fit copper and aluminum weather-proof threaded shell sockets and weather-proof threaded porcelain sockets made by wiring device manufacturers. The socket shown above is not regularly furnished with Quad reflectors.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Weight, Ea., Lbs.	Standard Pkg.
8120	100	12	5 1/2	1 1/2	10
8140	150	14	6 3/4	2 1/2	10
8160	200	16	7 3/4	3	10

Special Dome Reflector Threaded Type

The threaded type reflector is identical with the fitter type, except that it is equipped with a nickel plated copper ring to fit sockets listed on page 16.

Catalog No.	Size of Lamp Watts	Dia. "A"	Depth "B"	Net Weight, Ea., Lbs.	Standard Pkg.
8121	100	12	6	1 1/2	10
8141	150	14	7 1/4	2 1/2	10
8161	200	16	8 3/4	3	10

Miscellaneous Parts and Fittings

For Electrical Construction



Cat. No. 4507



Cat. No. 61



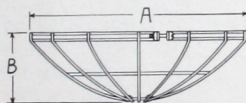
Cat. No. 71



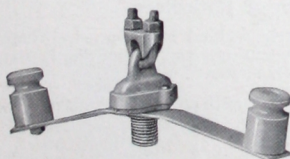
Box Cover
with Cord Grip
Cat. No. 6671



Outlet Cover
Cat. No. 60



Ceiling Fixture Guard
Cat. No. 178D



Support Combination
Cat. No. 55

Swivel Canopy and Stem

Porcelain enameled canopy has knockout for switch, a supporting strap and swivel device. Stem and swivel ball are integral, being porcelain enameled as one piece. Catalog listing includes 12 inch over length in white porcelain enamel with $\frac{1}{2}$ inch male pipe thread at lower end. A $\frac{3}{8}$ inch pipe thread and ivory finish are optional. Longer stems are carried in stock.

Catalog No.	Canopy	Length	Pipe Thread	Standard Pkg.
4507	$5\frac{1}{2}$ in.	12 in.	$\frac{1}{2}$ in. Male	5

Swivel Canopy for $\frac{1}{2}$ -Inch Pipe

Canopy is similar to above but is cadmium plated for use with galvanized pipe. Purchaser may paint or calcimine to suit.

Catalog No.	Diameter	Pipe Thread	Finish	Standard Pkg.
61	$5\frac{1}{2}$ in.	$\frac{1}{2}$ in. Female	Cadmium Plated	10

Cord Grip

A clamping device with $\frac{1}{2}$ inch male thread for suspending socket reflectors on reinforced cord.

Catalog No.	Pipe Thread	Finish	Standard Pkg.
71	$\frac{1}{2}$ in. Male	Cadmium Plated	10

Box Cover with Cord Grip

Catalog No.	Outlet Box Size	Finish	Standard Pkg.
6671	3 or 4 in. Round or Octagon	Cadmium Plated	10

Outlet Cover

An ivory porcelain enameled cover of good appearance for closing up unused outlets. Attaches to fixture stud by one center screw and cap nut.

Catalog No.	Diameter	Finish	Standard Pkg.
60	5 inch	Ivory Porcelain Enamel	10

Reflector Guard

A basket type guard made from heavy gauge tinned wire electrically welded with double wire ring at top to fit around bead of reflector and a machine screw and nut for attaching to reflector.

Catalog No.	Diameter	Depth	Standard Pkg.
169	8 in.	$2\frac{1}{4}$ in.	10
170	10 in.	3 in.	10
172	12 in.	$3\frac{1}{2}$ in.	10
174	14 in.	$4\frac{1}{8}$ in.	10
176	16 in.	$4\frac{3}{4}$ in.	10
178	18 in.	$5\frac{1}{4}$ in.	5
180	20 in.	$5\frac{3}{4}$ in.	5

Reflector Support Combination

Consists of wire rope clamp, porcelain bushed hanger (No. 54), cross arm with porcelain knobs and $\frac{1}{2}$ inch pipe nipple all cadmium plated.

Catalog No.	Pipe Thread	Finish	Standard Pkg.
55	$\frac{1}{2}$ in. Male	Cadmium Plated	10

Reflector Fittings

For Electrical Construction



Cat. No. 62

Canopy for 1/2-Inch Pipe

Made of 24 gauge (.025) Armco iron finished in black baked enamel with slip ring to fit 1/2-inch pipe. Has knockout in edge for canopy switch.

Catalog No.	Diameter In.	Finish	Standard Pkg.
62	5 1/2	Black Enamel	10



Cat. No. 66

Outlet Box Cover

A cover for mounting socket reflectors close to outlet box. Made of 14 gauge steel, offset and punched to fit 4 inch box.

Catalog No.	Diameter In.	Finish	Standard Pkg.
66	4 1/4	Black Enamel	10



Cat. No. 54

Porcelain Bushed Hanger

A weatherproof hanger, cast iron hot galvanized, with porcelain bushed wire ways for No. 14 rubber covered. Threaded for 1/2 inch pipe.

Catalog No.	Pipe Thread	Finish	Standard Pkg.
54	1/2-Inch Female	Cadmium Plated	10



Cat. No. 63

Conduit Gooseneck

Made of 1/2-inch galvanized conduit threaded both ends, 30 inches long after bending. Special lengths and sizes made to order.

Catalog No.	Size In.	Finish	Standard Pkg.
63	1/2 x 30	Cadmium Plated	10



Cat. Nos. 64 and 65

Wall and Pole Flanges

Heavy cast iron galvanized, with 7/16 inch holes for bolts or lag screws. Has wire ways for No. 14 rubber covered. Threaded for 1/2-inch gooseneck (3/4-inch if specified).

Catalog No.	Type	Pipe Thread	Finish	Standard Pkg.
64	Wall	1/2-Inch Female	Cadmium Plated	10
65	Pole	1/2-Inch Female	Cadmium Plated	10



Cat. Nos. 67 and 68

Threaded Porcelain Bushing

Drop Cord bushing of white glazed porcelain for use with socket or socket reflectors.

Catalog No.	Pipe Thread	Standard Pkg.
67	1/2-Inch Male	10
68	3/8-Inch Male	10



Locking Wire Guards

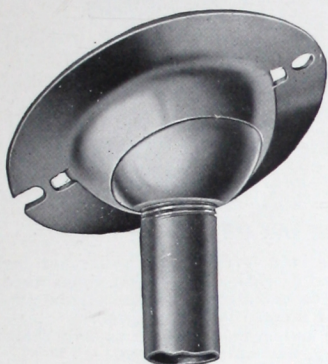
Locking Guards for Bottom of Reflectors

Strongly built of heavy steel wire, electric welded and tinned. Guard has a long locking screw with key to fit so that authorized persons only may remove same. One key is furnished with each standard package.

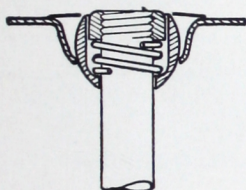
Catalog No.	Diameter Inches	Depth	Standard Pkg.
69	8	2 1/2	10
70	10	3	10
72	12	3 3/4	10
74	14	4 1/4	10
76	16	4 1/2	10
78	18	4 3/4	5

Swivel Hangers and Shock Absorbers

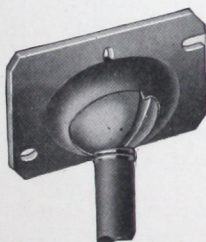
For Hanging Fixtures on Conduit Stems



Cat. No. 145G



Cat. No. 145GA

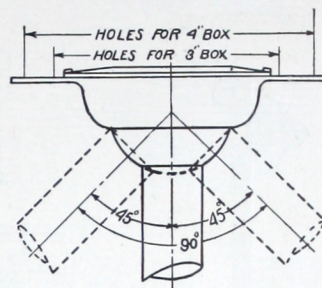


Cat. No. 1945G



Cat. No. 45G

Listed as Standard
by Underwriters Laboratories



Steel Swivel Hangers

The Quad Swivel Hanger was designed to align fixtures perfectly when hung from the steepest roofs, but on any ceiling whether flat, slightly sloping or sharply inclined, it makes for better construction and lower cost.

The Stamped Steel Swivel Hanger No. 145 G costs little more than fixture stud, hickey and knockout cover, three fittings that it replaces; and the labor saving, even on the smaller jobs is considerable.

The construction advantages of the swivel hanger over hickey and fixture stud are (1) more room in the outlet box, (2) unobstructed wire ways and (3) stems that hang straight without being bent into line.

Made of 14 gauge steel, with a cast iron ball threaded for $\frac{1}{2}$ inch conduit stem. Fits both 3 inch and 4 inch outlet boxes and will hang vertically even though the box is tilted 45 degrees. All parts are cadmium plated.

Catalog No.	Size of Box	Wt. of Std. Pkg.	Std. Pkg.
145 G	Both 3-In and 4-In. Round	6 lbs.	10
1945 G	4-In. Square No. 1900	6½ lbs.	10

Swivel Shock Absorber

For the industrial lighting installation that is subject to more than usual vibration or shock the Swivel Shock Absorber should be used.

This device in appearance and general construction is like the Steel Swivel Hanger with the addition of a compression spring of proper tension to "float" any reflector and stem having a combined weight of from 2 to 10 pounds. For units having a total weight of from 8 to 18 pounds a heavier spring will be furnished if specified.

It fits both 3 inch and 4 inch boxes and will hang vertically even though the box is tilted 45 degrees.

All parts are cadmium plated.

Catalog No.	Size of Box	Wt. of Std. Pkg.	Std. Pkg.
145 GA	Both 3-In and 4-In. Round	6 lbs.	8
1945 GA	4-In. Square No. 1900	6½ lbs.	8

Cast Iron Swivel Hanger

A heavy duty 45 degree Swivel Hanger for use in plants where cast iron fittings are required to resist corrosion. Fits 4 inch outlet box and is tapped for $\frac{1}{2}$ inch conduit stem.

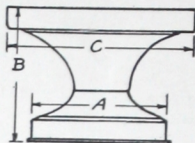
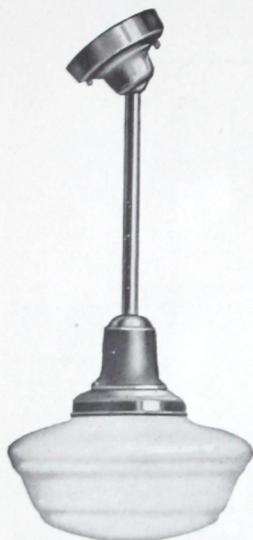
All parts are cadmium plated.

Catalog No.	Size of Box	Wt. of Std. Pkg.	Std. Pkg.
45 G	4-In. Round	12 lbs.	10

Note—All the above styles are threaded for $\frac{1}{2}$ -inch pipe stem but may be furnished for $\frac{3}{8}$ -inch or $\frac{3}{4}$ -inch if specified.

Swivel Stem Pendants and Ceiling Units

Made of Brass Electro-plated Statuary Bronze



For Schools, Stores and Offices

In the illumination of schools there is a very marked preference for lighting units suspended on stems instead of chains. The neat appearance and sanitary construction of the Quad swivel stem pendants should recommend these units for commercial and mercantile use as well.

The swivel stem hangs as straight and swings as free as any chain fixture and completely encloses the fuzzy, dust-catching wires.

Other special features are the sliding adjustable medium socket for focusing different size lamps and the one-screw safety globe holder.

Brass used is 22 B & S gauge throughout with substantial rolled beads at all edges. Statuary bronze, electroplated, buffed, polished and lacquered is the standard finish, other finishes on special order.

Both the Pendant and Ceiling unit have a knock-out for canopy switch. Ceiling unit does not have the adjustable socket.

Glassware is light density opal that presents a uniform appearance when illuminated and delivers a high per cent of the lamp's output.

Swivel Stem Pendant

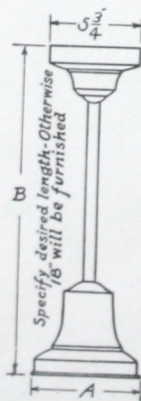
With Glassware

Catalog No.	Bowl Dia.	Size of Lamp	
		Socket Up	Adjustment Down
1051	4 x 10	100	60
1151	4 x 12	150	100
1251	6 x 12	200	150
1451	6 x 14	200	150
1651M	6 x 16	300-500	

Pendant Holder Only

Catalog No.	Dia. "A"	Length "B"	Socket	Standard Pkg.
4541	4	18	Adj.-Med.	12
4541	4	18	Adj.-Med.	12
4561	6	18	Adj.-Med.	12
4561	6	18	Adj.-Med.	12
4561M	6	18	Mogul	6
4581M	8	18	Mogul	6

The above Pendants will be furnished in any length ordered. Lengths carried in stock are 18, 24 and 30 inches, but unless otherwise specified fixtures 18 inches long will be furnished.



Enclosed Ceiling Units

With Glassware

Catalog No.	Bowl Dia.	Size of Lamps	
		Watts	
944	4 x 9	60	
1044	4 x 10	100	
1244	4 x 12	150	
1444	6 x 14	200	
1544M	6 x 16	300-500	
1644M	6 x 16	300-500	

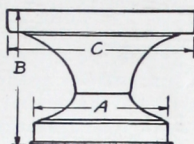
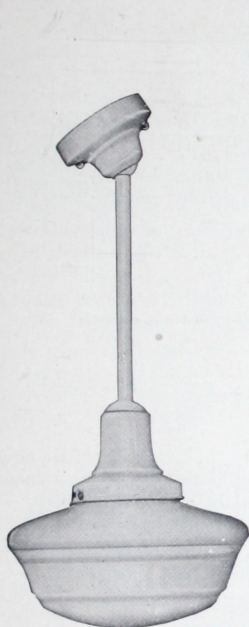
Ceiling Holders Only

Catalog No.	Fitter "A"	Dia. "C"	Depth "B"	Socket	Standard Pkg.
644	4	6	4	Medium	12
844	4	8	5 1/4	Medium	12
844	4	8	5 1/4	Medium	12
864	6	8	6	Medium	12
864M	6	8	6	Mogul	6
1064M	6	10	6 1/4	Mogul	6
1084M	8	10	6 1/4	Mogul	6

Pendant and Ceiling Units are furnished with a knock-out for canopy switch. Individual switch control and 6-ft. cord if specified.

Swivel Stem Pendants and Ceiling Units

Made of Armco Iron Porcelain Enameled White



For the Spic and Span Establishment

Hospital, Laboratory, Dairy, Bakery, Lunchroom, Barber Shop or any establishment that must be spic and span will appreciate these porcelain enameled Quad lighting units. The simple lines and glassy smooth surface offer no resting place for dirt and the finish is permanently white.

The Swivel Stem Pendant hangs straight from any ceiling whether flat, or sharply sloping. All unsightly wires are concealed within the stem.

A sliding adjustable socket for medium base lamps in the Pendant unit and a practical one-screw safety globe holder in both the Pendant and Ceiling Units are exclusive Quad features.

Fixtures are made of Armco iron 24 U.S. standard gauge finished in Vitreous (porcelain) enamel consisting of a ground coat and two coats of white. Ivory or other tints of porcelain enamel furnished on special order.

Glassware is a light density opal and produces a well diffused light with little loss by absorption.

Swivel Stem Pendant

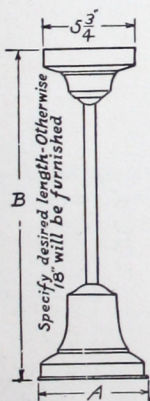
With Glassware

Catalog No.	Bowl Dia.	Size of Lamp	
		Socket Up	Adjustment Down
1057	4 x 10	100	60
1157	4 x 12	150	100
1257	6 x 12	200	150
1457	6 x 14	200	150
1657M	6 x 16	300-500	

Pendant Holder Only

Catalog No.	Dia. "A"	Length "B"	Socket	Standard Pkg.
4547	4	18	Adj-Med.	12
4547	4	18	Adj-Med.	12
4567	6	18	Adj-Med.	12
4567	6	18	Adj-Med.	12
4567M	6	18	Mogul	6
4587M	8	18	Mogul	6

The above Pendants will be furnished in any length ordered. Lengths carried in stock are 18, 24, 30, 36 and 42 inches, also breaks and fittings for assembling extra long stems. Unless length is specified fixtures 18 inches long will be furnished.



Enclosed Ceiling Units

With Glassware

Catalog No.	Bowl Dia.	Size of Lamps	
		Watts	
947	4 x 9	60	
1047	4 x 10	100	
1247	4 x 12	150	
1447	6 x 14	200	
1547M	6 x 16	300-500	
1647M	6 x 16	300-500	

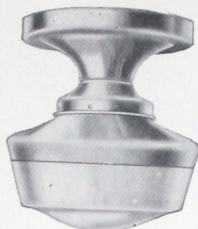
Pendant Holder Only

Catalog No.	Fitter "A"	Dia. "C"	Depth "B"	Socket	Standard Pkg.
647	4	6	4	Medium	12
847	4	8	5 1/4	Medium	12
847	4	8	5 1/4	Medium	12
867	6	8	6	Medium	12
867M	6	8	6	Mogul	6
1067M	6	10	6 3/4	Mogul	6
1087M	8	10	6 3/4	Mogul	6

Pendant and Ceiling Units are furnished with a knock-out for canopy switch. Individual switch control and 6-ft. cord if specified.

Ceiling Units in Color

Porcelain Enameled Green—Orchid—Ivory—Blue and White



Catalog No. 302C

Colored Holder, Globe to match and Keyless Socket



Catalog No. 301C

Colored Holder, Globe to match and Pull Socket with 6 ft. Cord



Catalog No. 300C

Colored Holder, Globe, Socket and Plug-in-Switch with 5 ft. Silk Covered three-conductor cord to match.

Color Harmony

Holders and globes are finished in soft pastel shades that harmonize well with present day tendencies in interior decoration. The colors are permanent, the porcelain enameled being fused to iron forms and burned in at high temperatures.

While this line is made only in one size (for 75 to 150 watt lamps) the three styles and several colors offered are suitable for many various uses in the home and elsewhere. Used in bedroom, bath, kitchen, nurseries, kindergartens, Sunday schools, social rooms, hospital wards and the corridors and wash rooms of public buildings, these quality units are entirely in good taste.

Holder with Colored Globe

(Specify Color)

Catalog No.	Type	Holder	Size	Globe Size	Shipping Wt. Std. Pkg.	Standard Pkg.
302C	Keyless		8x4	9x4	22 lbs.	4
301C	Pull Socket		8x4	9x4	22 lbs.	4
300C	Plug-in Switch		8x4	9x4	23 lbs.	4

Holder with White Globe

(Specify Color of Holder)

Catalog No.	Type	Holder	Size	Globe Size	Shipping Wt. Std. Pkg.	Standard Pkg.
302W	Keyless		8x4	9x4	22 lbs.	4
301W	Pull Socket		8x4	9x4	22 lbs.	4
300W	Plug-in Switch		8x4	9x4	23 lbs.	4

Holder Without Globe

(Specify Color)

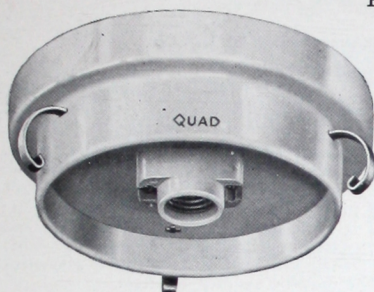
Catalog No.	Type	Holder	Size	Shipping Wt. Std. Pkg.	Standard Pkg.
302	Keyless		8x4	27 lbs.	12
301	Pull Socket		8x4	28 lbs.	12
300	Plug-in Switch		8x4	31 lbs.	12

Plug-in-Switch

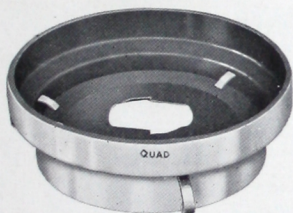
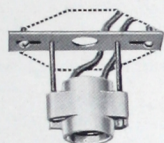
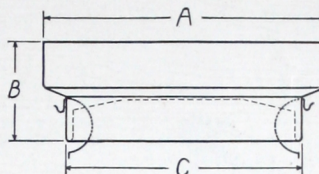
In addition to the usual keyless and pull socket types the Quad 300 Line includes the Plug-in-Switch—a combined switch to control the light and a convenience outlet that is always ready for use. This device was originally developed and introduced as an exclusive Quad feature.

QD Safety Ceiling Collars

Porcelain Enameled Ivory

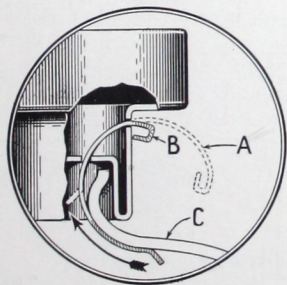


Patented
and
Patents
Pending



Easy to Install

First wire the socket, then place holder against the ceiling giving it a quarter turn and drawing two screws tight.



Cut-out view of Collar showing:

- A—Finger open to receive globe.
- B—Finger closed to support globe.
- C—Any globe with standard fitter.

For Corridor and Low Ceilings

In many locations a small, inconspicuous ceiling collar is more suitable than any other type of fixture. Used with the modern, elongated style of glassware, the effect is particularly pleasing.

The QD ceiling collar is designed to provide the shallowest construction consistent with practical installation methods. A considerable saving of labor is assured because of ease and speed of installation. The screwless globe holder is surprisingly simple and safe.

Made of best vitreous enameling iron finished in three coats of porcelain enamel. Light ivory is the standard color, other tints or white on special order. Regularly supplied without glassware or with globes shown on pages 34 and 35 if specified. All collars have knockout for canopy switch.

QD Safety Ceiling Holder

With Glassware

Catalog No.	Lamp Size Watts	Fitter "A"	Dia. "C"	Bowl Dia.	Standard Pkg.
4047	60-100	4	5½	4x10	12
4247	150	4	5½	4x12	12
6467	200	6	7¾	6x14	12
6667M	300-500	6	7¾	6x16	6

Without Glassware

Catalog No.	Fitter "A"	Depth "B"	Dia. "C"	Socket	Standard Pkg.
447	4	2¾	5½	Medium	12
667	6	2¾	7¾	Medium	12
667M	6	2¾	7¾	Mogul	6

Clear Top Semi-Indirect

Plated Statuary Bronze or in Ivory Vitreous Enamel

Dustproof—Easy to Clean

For the general illumination of better class offices, this semi-indirect unit can hardly be surpassed. It imparts a cheerful glow below the horizontal, delivering upward a strong, well diffused flood of light that is spread uniformly on the ceiling.

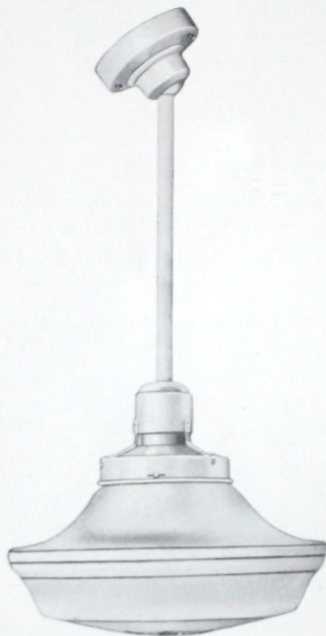
The upper portion of the large enclosed bowl is crystal glass, slightly hazed, to eliminate unsightly streaks and shadows on the ceiling. Lower portions of the bowl are glass-enameled to proper density and in some cases pleasingly decorated.

The globe-holder itself is skeletonized and fitted with a hazed crystal glass disc so that it casts no shadow on the ceiling. This construction permits free transmission of light upward and provides a dust-tight cover that may be readily cleaned.

The swivel canopy with pendant stem hangs straight on any ceiling, flat or sloping, and swings free. Fuzzy dust-catching wires are entirely enclosed.

The globe-holding device consists of a single screw with locking wing-nut that acts against a phosphor bronze spring support at the opposite side of the holder.

All fixtures have knockout for canopy switch. Standard length is 30 inches over all. Decoration consists of two horizontal stripes with conventional sunburst on bottom.



Clear Top Semi-Indirect

Made of Iron Porcelain Enameled Ivory or of Brass Electro-plated Statuary Bronze.

Decoration is in Tan and consists of two horizontal stripes with conventional sunburst on bottom.

Plated Statuary Bronze

Fixture portion made of 22 B & S gauge brass throughout, electro-plated, buffed and polished.

White Glass-Enameled Bowl with Tan Decoration

Catalog No.	Lamp Size Watts	Bowl Dimensions	Standard Pkg.
1271D	100-150	6x12x6¼	4
1471D	200	6x14x6½	4
1671MD	300-500	6x16x8	4

Plain White Glass-Enameled Bowl

Catalog No.	Lamp Size Watts	Bowl Dimensions	Standard Pkg.
1271	100-150	6x12x6¼	4
1471	200	6x14x6½	4
1671M	300-500	6x16x8	4

Note: Any of the above numbers furnished in Ivory Glass-Enameled Bowl if specified.

Ivory Vitreous Enamel

Fixture portion made of high grade enameling iron, 24 U. S. gauge, finished in Ivory Vitreous (Porcelain) Enamel.

Ivory Glass-Enameled Bowl with Tan Decoration

Catalog No.	Lamp Size Watts	Bowl Dimensions	Standard Pkg.
1277D	100-150	6x12x6¼	4
1477D	200	6x14x6½	4
1677MD	300-500	6x16x8	4

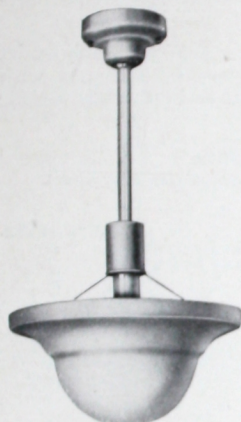
Plain Ivory Glass-Enameled Bowl

Catalog No.	Lamp Size Watts	Bowl Dimensions	Standard Pkg.
1277	100-150	6x12x6¼	4
1477	200	6x14x6½	4
1677M	300-500	6x16x8	4

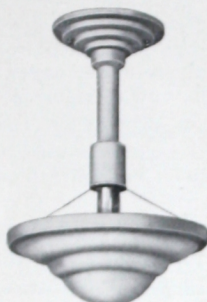
Note: Any of the above numbers furnished with White Glass-Enameled Bowl or with fixture portion in White Vitreous (Porcelain) Enamel if specified.

Indirect Lighting Units

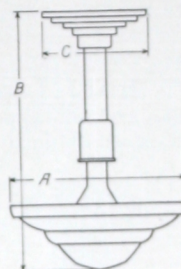
Porcelain Enameled Mat Ivory



Swivel Stem Indirect
Mat Ivory Finish with Inner
Reflector



Commercial Type Indirect
Mat Ivory Outside, Glazed
White Inside



Shadowless Illumination

With the new Quad development of vitreous enamel in mat finish it is possible to offer indirect lighting units of refined appearance that never need refinishing.

For the well appointed office, hospitals and certain types of industrial installations, these units provide a shadow-free system of lighting that is ideal.

The range of types includes a swivel stem unit with frosted aluminum reflector, a swivel stem unit with a reflecting surface of glazed white porcelain enamel and a commercial type of modernistic design finished white porcelain enamel inside.

Swivel Stem Indirect

Mat Ivory Finish with Inner Reflector

Reflector is of aluminum, specially treated to produce a velvet smooth frosted surface with a very high reflection factor. Tests showing a factor of .90 are not unusual. Contour of reflector is such as to deliver a wide spread of light free from striations. Units are also furnished without inner reflector when so specified.

Catalog No.	Lamp Size Watts	Dia. "A"	Length "B"	Canopy "C"	Socket	Standard Pkg.
1253	100-150	12	30	5½	Medium	4
1453	150-200	14	36	5½	Medium	4
1453M	300-500	14	36	5½	Mogul	4

Swivel Stem Indirect

Mat Ivory Outside, Glazed White Inside

The bowl is of graceful contour with an outward turned lip that reduces the sharpness of shadow line on wall or ceiling. The swivel canopy with pendant stem hangs straight on any ceiling and unsightly wires are entirely enclosed.

Catalog No.	Lamp Size Watts	Dia. "A"	Length "B"	Canopy "C"	Socket	Standard Pkg.
1473	150-200	14	30	5½	Medium	4
1473M	300-500	14	30	5½	Mogul	4

Commercial Type Indirect

Mat Ivory Outside, Glazed White Inside

The pleasing modern lines of the reflecting bowl were designed primarily for widespread distribution of light so that even with close-to-ceiling mounting, highly efficient indirect lighting is obtained. This quality indirect fixture sells at about the price of the usual glass globe commercial unit.

Catalog No.	Lamp Size Watts	Dia. "A"	Length "B"	Canopy "C"	Socket	Standard Pkg.
973	60-100	9	12	6	Medium	4
1373	150-200	13	20	8	Medium	4
1373M	300-500	13	20	8	Mogul	4



Swivel Stem Indirect
Mat Ivory Outside, Glazed
White Inside



Wall Brackets and Ceiling Units

Porcelain Enameled White and Plated Statuary Bronze

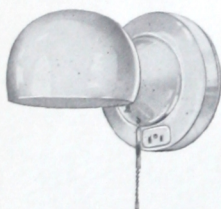
The Companion lines of lighting equipment on this page are for use as auxiliary units to the Swivel Pendants and Enclosed Ceiling Units in Armco iron porcelain enameled and in brass plated statuary bronze listed on several preceding pages. These open shade units are suitable for toilets and washrooms, stair halls and corridors.

Holders are 5½ inches in diameter to cover ragged edges of plaster around 4-inch outlet box and are supported by an inside strap with concealed screws. Fitters take shades with standard 2¼-inch necks. Units are adapted to use on 3 and 4-inch outlets and on switch boxes.



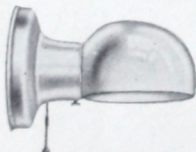
Catalog No. 537
Porcelain Enameled White

Catalog No. 531
Plated Statuary Bronze



Catalog No. 227
Porcelain Enameled White

Catalog No. 221
Plated Statuary Bronze



Catalog No. 427
Porcelain Enameled White

Catalog No. 421
Plated Statuary Bronze



Catalog No. 577
Porcelain Enameled White

Catalog No. 571
Plated Statuary Bronze

White Porcelain Enameled Units

Made of Armco iron 24 U. S. standard gauge finished in vitreous (porcelain) enamel.

Catalog No.		Wall Units With Glassware		Standard Pkg.
		Style and Type of Equipment		
227	Half Shade	Pull Socket	Convenience Outlet	12
327	Half Shade	Keyless Socket	Convenience Outlet	12
427	Half Shade	Pull Socket	Convenience Outlet	12
527	Half Shade	Keyless Socket	Convenience Outlet	12
Without Glassware				
257	2¼ Fitter	Pull Socket	Convenience Outlet	12
357	2¼ Fitter	Keyless Socket	Convenience Outlet	12
457	2¼ Fitter	Pull Socket	Convenience Outlet	12
557	2¼ Fitter	Keyless Socket	Convenience Outlet	12

Ceiling Units With Glassware

437	Bowl Shade	Pull Socket and 6 ft. cord	12
537	Bowl Shade	Keyless Socket	12

Without Glassware

467	2¼ Fitter	Pull Socket and 6 ft. cord	12
557	2¼ Fitter	Keyless Socket	12

Rosette for Ball Lamp

477	Pull Socket and 6 ft. cord	12
577	Keyless Socket	12

Note: The Ball Lamp Rosette is supported by a slotted cross strap with screw heads exposed instead of concealed as in other units listed above. Rosette may also be ordered with short pull chain and insulator for side wall mounting.

Plated Statuary Bronze Units

Made of 22 B & S gauge brass electroplated statuary bronze, buffed, polished and lacquered.

Catalog No.		Wall Units With Glassware		Standard Pkg.
		Style and Type of Equipment		
221	Half Shade	Pull Socket	Convenience Outlet	12
321	Half Shade	Keyless Socket	Convenience Outlet	12
421	Half Shade	Pull Socket	Convenience Outlet	12
521	Half Shade	Keyless Socket	Convenience Outlet	12
Without Glassware				
251	2¼ Fitter	Pull Socket	Convenience Outlet	12
351	2¼ Fitter	Keyless Socket	Convenience Outlet	12
451	2¼ Fitter	Pull Socket	Convenience Outlet	12
551	2¼ Fitter	Keyless Socket	Convenience Outlet	12

Ceiling Units With Glassware

431	Bowl Shade	Pull Socket and 6 ft. cord	12
531	Bowl Shade	Keyless Socket	12

Without Glassware

461	2¼ Fitter	Pull Socket and 6 ft. cord	12
551	2¼ Fitter	Keyless Socket	12

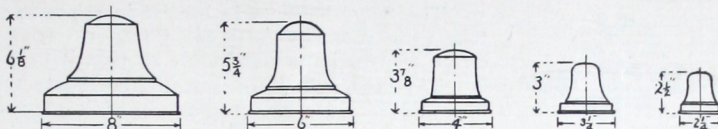
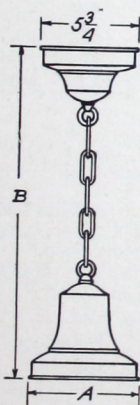
Rosette for Ball Lamp

471	Pull Socket and 6 ft. cord	12
571	Keyless Socket	12

Note: The Ball Lamp Rosette is supported by a slotted cross strap with screw heads exposed instead of concealed as in other units listed above. Rosette may also be ordered with short pull chain and insulator for side wall mounting.

Commercial Lighting Units

Made of Brass Electro-plated Statuary Bronze



The quality of the material used in these units is exceptionally good. Holders are extra deep and full 22 gauge after forming. Substantial chain, heavy brass loops, 5 3/4 inch diameter canopy, mogul or medium socket and nitrogen wire, with the holder, make up a standardized pendant that may be specified with complete confidence.

The Sliding Adjustable medium socket, provides for correct filament position of two sizes of lamp in each fixture.

Standard finish is an electro-plated, buffed and polished statuary bronze that is good looking and durable. Other finishes on special order.

Glassware is a light density opal and produces a well diffused light with little loss by absorption. The surfaces of the bowl are smooth with no crevices where dirt may lodge. The simple lines and pleasing proportions present a good appearance in any store or office.

Chain Pendants

With Enclosing Bowl

Catalog No.	Size of Lamp Socket Adjustment		Size of Pendant		Socket	Bowl Dia.	Standard Pkg.
	Up	Down	Dia. "A"	Length "B"			
941	100	50-60	4	30	Adj. Med.	4x9	12
1041	150	100	4	30	Adj. Med.	4x10	12
1341	150	100	4	30	Adj. Med.	4x12	12
1241	200	150	6	30	Adj. Med.	6x12	12
1441	200	150	6	30	Adj. Med.	6x14	12
1641M		300-500	6	30	Mogul	6x16	6

Without Glassware

Catalog No.	Size of Pendant		Socket	Standard Package
	Dia. "A"	Length "B"		
102	2 1/4	30	Brass-Medium	12
103	3 1/4	30	Brass-Medium	12
104	4	30	Adj. Medium	12
106	6	30	Adj. Medium	12
106M	6	30	Mogul	12
108M	8	30	Mogul	6

All canopies have knockout for canopy switch. In ordering chain pendants with individual switch control use catalog numbers listed above with the addition of a suffix S, thus: No. 941S, No. 102S, No. 106MS, etc.

Fixture Parts

Class C

Mogul Socket

Catalog No. 35—One piece glazed porcelain body with brass casting tapped for 3/8-inch pipe or fixture loop. Standard package 20.

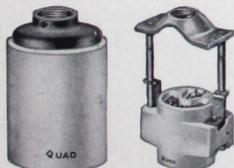
Adjustable Medium Socket

One piece porcelain with screw terminals. May be raised or lowered on rods for lamps of different filament length.

Catalog No. 36 with 3/8-inch female pipe thread. Standard package 20.
Catalog No. 36A with 1/2-inch female pipe thread. Standard package 20.
Catalog No. 36B with 3/4-inch female pipe thread. Standard package 20.

Malleable Hickey

Catalog No. 37—3/8 x 3/8-inch hickey. Standard package 20.
Catalog No. 38—1/2 x 3/8-inch hickey. Standard package 20.



Mogul Socket Medium Socket



Malleable Hickey



Outlet-Box Receptacles

For 4-inch and 3-inch Outlet Boxes



Cat. Nos. 31 and 41

The Quad Receptacle is neat in appearance and of such size as to take little room in the box. Porcelain is keyed to the 14-gauge iron cover by two galvanized clips so that it cannot loosen or turn.

The screw shell and spring lamp contact are riveted to the porcelain and sealed with compound. Wire leads are 6 inches long and soldered to make good mechanical and electrical contact. Takes standard $2\frac{1}{4}$ and $3\frac{1}{4}$ inch shade-holders for porcelain sockets.

Approved by the Underwriters' Laboratories. Rating 660 watts. 600 volts.

Flat Cover Receptacles

With Soldered Wire Leads



Cat. Nos. 33 and 43

For 4 Inch Box			For 3 Inch Box		
Cat. No.	Finish	Wire Leads	Cat. No.	Finish	Wire Leads
41	Black Japanned	New Code	31	Black Japanned	New Code
41A	Black Japanned	Slow Burning	31A	Black Japanned	Slow Burning
41G	Galvanized	New Code	31G	Galvanized	New Code
41AG	Galvanized	Slow Burning	31AG	Galvanized	Slow Burning

With Screw Terminals

Cat. No.	Finish	Cat. No.	Finish
43	Black Japanned	33	Black Japanned
43G	Galvanized	33G	Galvanized

Raised Cover Receptacles

These receptacles are similar to those above except that the covers instead of being flat are offset $\frac{5}{8}$ inch to provide more room in the box. The $3\frac{1}{2}$ -inch diameter raised cover is especially useful as the smaller boxes are often crowded with wires.



Cat. Nos. 30 and 40

With Soldered Wire Leads

For 4 Inch Box			For 3 Inch Box		
Cat. No.	Finish	Wire Leads	Cat. No.	Finish	Wire Leads
40	Black Japanned	New Code	30	Black Japanned	New Code
40A	Black Japanned	Slow Burning	30A	Black Japanned	Slow Burning
40G	Galvanized	New Code	30G	Galvanized	New Code
40AG	Galvanized	Slow Burning	30AG	Galvanized	Slow Burning

With Screw Terminals

Cat. No.	Finish	Cat. No.	Finish
42	Black Japanned	32	Black Japanned
42G	Galvanized	32G	Galvanized

Square Flat Cover Receptacles

For 4 Inch (No. 1900) Box

With Soldered Wire Leads

Cat. No.	Finish	Wire Leads
44	Black Japanned	New Code
44A	Black Japanned	Slow Burning
44G	Galvanized	New Code
44AG	Galvanized	Slow Burning

With Screw Terminals

Cat. No.	Finish
46	Black Japanned
46G	Galvanized



Cat. No. 44

Standard Package, 20

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12PB	QD Pull Reflector.....	27	70	Locking Guard.....	32
12PH	QD Pull Reflector.....	27	71	Cord Grip.....	31
12PV	QD Pull Reflector.....	27	72	Locking Guard.....	32
12V	QD Keyless Reflector.....	26	73	Socket Hood.....	9
14B	QD Keyless Reflector.....	26	73M	Socket Hood.....	9
14H	QD Keyless Reflector.....	26	73P	Pull Socket Hood.....	9
14PB	QD Pull Reflector.....	27	74	Locking Guard.....	32
14PH	QD Pull Reflector.....	27	75	Socket Hood.....	9
14PV	QD Pull Reflector.....	27	75M	Socket Hood.....	9
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16PH	QD Pull Reflector.....	27	83M	Jumbo Threaded Socket Hood.....	15
16PV	QD Pull Reflector.....	27	85	Jumbo Threaded Socket Hood.....	15
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31AG	Receptacle.....	42	106	Chain Hanger.....	41
31G	Receptacle.....	42	106M	Chain Hanger.....	41
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33G	Receptacle.....	42	112	RLM Socket Reflector.....	10
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41A	Receptacle.....	42	172	Reflector Guard.....	31
41AG	Receptacle.....	42	174	Reflector Guard.....	31
41G	Receptacle.....	42	176	Reflector Guard.....	31
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44AG	Receptacle.....	42	210	Deep Bowl Socket Reflector.....	13

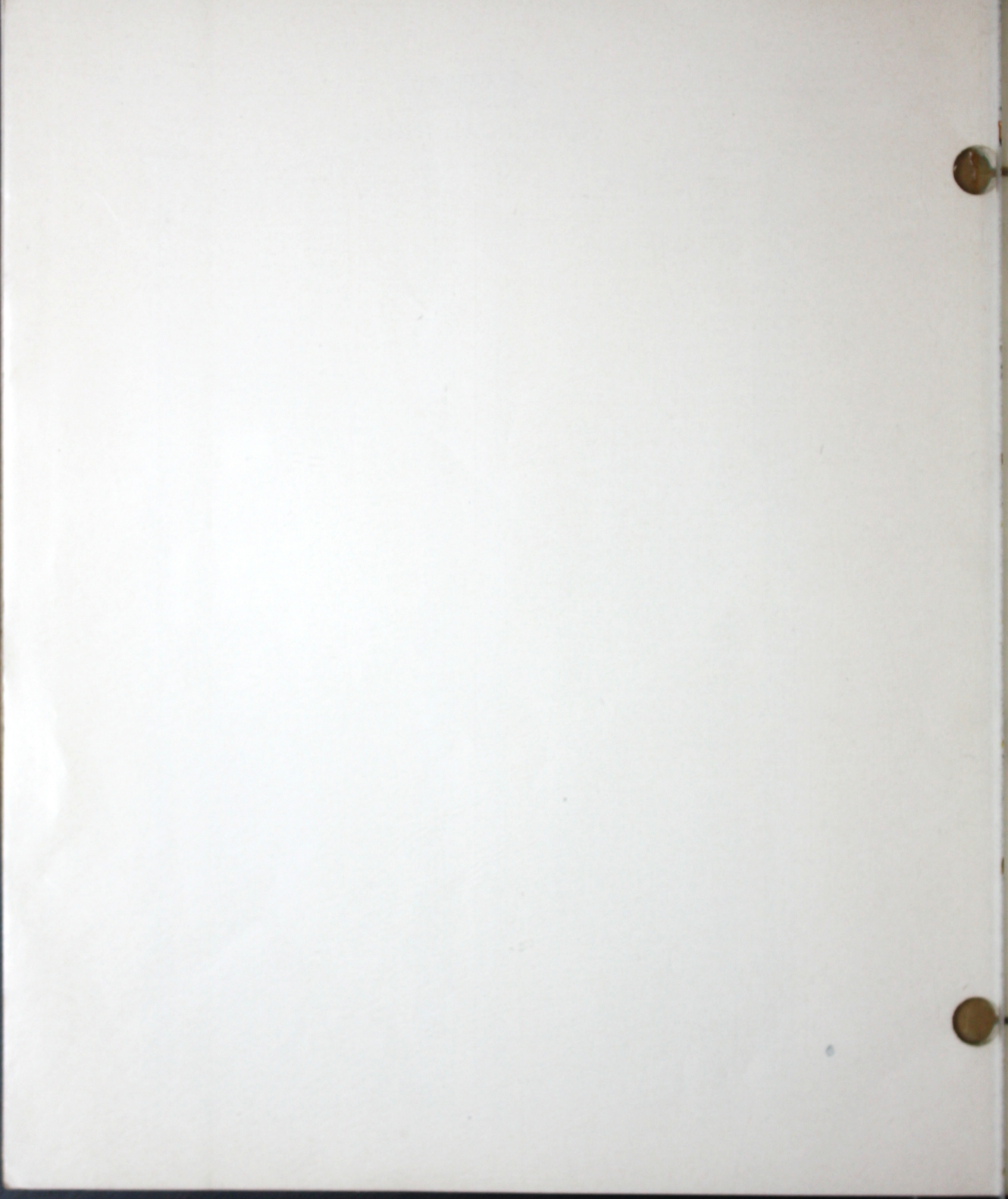


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527	Wall Unit.....	40	1184M	Jumbo Threaded Dome Reflector	15
531	Ceiling Unit.....	40	1186M	Heavy Threaded Dome Reflector	9
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3120	Shallow Bowl Fitter Reflector.....	17	8120	Special Dome Fitter Reflector.....	30
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3140	Shallow Bowl Fitter Reflector.....	17	8125V	Special Dome Socket Reflector.....	28
3141	Shallow Bowl Thread Reflector.....	17	8125PB	Special Dome Socket Reflector.....	29
3142	Heavy Thr. Shal. Bowl Refl. only.....	15	8125PH	Special Dome Socket Reflector.....	29
3144	Jumbo Shallow Bowl Reflector.....	15	8125PV	Special Dome Socket Reflector.....	29
3160	Shallow Bowl Fitter Reflector.....	17	8140	Special Dome Fitter Reflector.....	30
3161	Shallow Bowl Threaded Reflector.....	17	8141	Special Dome Thread Reflector.....	30
3162	Heavy Thr. Shal. Bowl Refl. only.....	15	8145B	Special Dome Socket Reflector.....	28
3164	Jumbo Shallow Bowl Reflector.....	15	8145H	Special Dome Socket Reflector.....	28
3182	Heavy Thr. Shal. Bowl Refl. only.....	15	8145V	Special Dome Socket Reflector.....	28
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3187	Glassteel Diffuser.....	8	8145PH	Special Dome Socket Reflector.....	29
3207M	Glassteel Diffuser.....	8	8145PV	Special Dome Socket Reflector.....	29
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4014	Outlet Box Reflector.....	21	8161	Special Dome Thread Reflector.....	30
4047	Ceiling Collar and Globe.....	37	8165B	Special Dome Socket Reflector.....	28
4120	Flat Cone Fitter Reflector.....	18	8165H	Special Dome Socket Reflector.....	28
4121	Flat Cone Threaded Reflector.....	18	8165V	Special Dome Socket Reflector.....	28
4140	Flat Cone Fitter Reflector.....	18	8165PB	Special Dome Socket Reflector.....	29
4141	Flat Cone Threaded Reflector.....	18	8165PH	Special Dome Socket Reflector.....	29
4160	Flat Cone Fitter Reflector.....	18	8165PV	Special Dome Socket Reflector.....	29
4161	Flat Cone Threaded Reflector.....	18	8185MH	Special Dome Socket Reflector.....	28
4187	Glassteel Diffuser.....	6	8185MV	Special Dome Socket Reflector.....	28



Price List

Applying to Catalog No. 4



Telephone Monroe 6041

QUADRANGLE MFG. CO.

32 South Peoria Street --- Chicago, Ill.

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Glassteel Diffuser

Safety Type

Glassteel with Opal Globe

Cat. No.	Watts	Dia.	Std. Pkg.	List
5187	150-200	18	4	\$9.25
5207M	300-500	20	4	12.75

Glassteel with Trutint Globe

4187	150-200	18	4	9.75
4207M	300-500	20	4	13.50

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Glassteel Diffuser

Threaded Type

Globes for Replacement

101	150-200	6x10	4	2.30
121	300-500	6x12	4	3.60
96	150-200	6x10	4	2.80
98	300-500	6x12	4	4.35

Glassteel with Opal Globe

2187	150-200	18	4	9.00
2207M	300-500	20	4	12.50

Glassteel with Trutint Globe

3187	150-200	18	4	9.50
3207M	300-500	20	4	13.25

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Heavy Threaded

Dome Reflector

RLM Standard

With Keyless Socket for 1/2" Conduit

1126	100	12	10	4.05
1146	150	14	10	4.35
1166	200	16	10	4.75
1186M	300-500	18	5	6.15
1206M	750-1000	20	5	8.15

Outlet Box Type (Cat. No. 1126B, etc.), furnished at no extra charge.

With Pull Socket for 1/2" Conduit

1126P	100	12	10	4.85
1146P	150	14	10	5.15
1166P	200	16	10	5.55

Porcelain Enameled Socket Hoods

Socket Hoods Less Reflectors

73	Med. Keyless 1/2" Con.	10	1.95
73M	Mogul Keyless 1/2" Con.	10	2.35
73P	Med. Pull 1/2" Con.	10	2.75
75	Med. Keyless 4" Box	10	1.95
75M	Mogul Keyless 4" Box	10	2.35
75P	Med. Pull 4" Box	10	2.75

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Dome Socket Reflector

RLM Standard

With Keyless Socket

111	60	12	10	3.20
112	100	12	10	3.30
114	150	14	10	3.50
116	200	16	10	4.30
118M	300-500	18	5	5.30
120M	750-1000	20	5	7.20

With Pull Socket

111P	60	12	10	4.00
112P	100	12	10	4.10
114P	150	14	10	4.30
116P	200	16	10	5.10

Sockets Non-adjustable

Sockets for Reflectors

50R	Medium Keyless	10	1.05
51R	Medium Pull	10	1.85
35R	Mogul Socket	10	1.50

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Shallow Bowl Socket Reflector

Cat. No. 66 See under P. 32

With Keyless Socket

Cat. No.	Watts	Dia.	Std. Pkg.	List
312	100-60	12	10	\$3.50
314	150-100	14	10	3.80
316	200-150	16	10	4.60

With Pull Socket

312P	100-60	12	10	4.30
314P	150-100	14	10	4.60
316P	200-150	16	10	5.40

Sockets Adjustable

Sockets for Reflectors

50	Adj.—Med. Keyless	10	1.05
51	Adj.—Med. Pull	10	1.85

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Flat Cone Socket Reflector

Cat. No. 50 See under P. 11
Cat. No. 51 See under P. 11
Cat. No. 35-R See under P. 10

With Keyless Socket

414	100-60	14	10	3.50
416	150-100	16	10	3.80
418	200	18	5	4.60
418M	300-500	18	5	5.10

With Pull Socket

414P	100-60	14	10	4.30
416P	150-100	16	10	4.60
418P	200	18	5	5.40

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Deep Bowl Socket Reflector

Cat. No. 50 See under P. 11
Cat. No. 51 See under P. 11
Cat. No. 35-R See under P. 10

With Keyless Socket

207	100-60	7	10	2.90
208	150-100	8	10	3.20
210	200-150	10	10	3.80
212M	300-500	12	5	4.70

With Pull Socket

207P	100-60	7	10	3.70
208P	150-100	8	10	4.00
210P	200-150	10	10	4.60

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Angle Socket Reflector

Cat. No. 50 See under P. 11
Cat. No. 51 See under P. 11
Cat. No. 35-R See under P. 10

With Keyless Socket

508	60-25	8	10	2.75
510	150-100	10	10	2.95
512	200-150	12	10	3.45
514M	300-500	14	5	4.95

With Pull Socket

508P	60-25	8	10	3.55
510P	150-100	10	10	3.75
512P	200-150	12	10	4.25

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Jumbo Socket Hoods and Reflectors

RLM Dome Reflector with Socket Hood

1124	100	12	10	3.20
1144	150	14	10	3.50
1164	200	16	5	3.90
1184M	300-500	18	5	5.40
1204M	750-1000	20	5	7.40

Shallow Bowl Reflector with Socket Hood

3124	60-100	12	10	2.75
3144	100-150	14	10	3.25
3164	150-200	16	5	3.85
3184M	300-500	18	5	5.10

Outlet Box Type
(Cat. No. 1124-B, etc.), fur-
nished at no extra charge

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(Continued)

Pull Socket
Medium Base. \$0.80 Extra
List

Deep Bowl Reflector with Socket Hood

Cat. No.	Watts	Dia.	Std. Pkg.	List
2084	100-150	8	10	\$2.90
2104	150-200	10	10	3.50
2124M	300-150	12	5	5.20

Angle Reflector with Socket Hood

5104	100-150	10	10	2.90
5124	150-200	12	5	3.85
5144M	300-500	14	5	6.15

Heavy Threaded
Reflectors Only

RLM Dome Reflector

1122	100	12	10	2.10
1142	150	14	10	2.40
1162	200	16	5	2.80
1182	300-500	18	5	3.80
1202	750-1000	20	5	5.80

Shallow Bowl Reflector

3122	100	12	10	1.65
3142	150	14	10	2.15
3162	200	16	5	2.75
3182	300-500	18	5	3.50

Deep Bowl Reflector

2082	100-150	8	10	1.80
2102	200	10	10	2.40
2122	300-500	12	5	3.60

Angle Reflector

5102	100-150	10	10	1.80
5122	200	12	5	2.75
5142	300-500	14	5	4.55

Jumbo Threaded
Socket Hoods

Jumbo Threaded Socket Hoods

83	Med. Keyless 1/2" Con.	10	1.10
83M	Mogul Keyless 1/2" Con.	10	1.60
85	Med. Keyless 4" Box	10	1.10
85M	Mogul Keyless 4" Box	10	1.60

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Dome Reflectors

RLM Standard

Fitter Type

1110	60	12	10	1.80
1120	100	12	10	1.90
1140	150	14	10	2.20
1160	200	16	10	2.60

Threaded Type

1111	60	12	10	1.95
1121	100	12	10	2.05
1141	150	14	10	2.35
1161	200	16	10	2.75

Fitter Type

3100	25-40	10	10	1.25
3120	60-100	12	10	1.45
3140	150	14	10	2.00
3160	200	16	10	2.50

Threaded Type

3101	25-40	10	10	1.40
3121	60-100	12	10	1.60
3141	150	14	10	2.15
3161	200	16	10	2.65

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Shallow Bowl
Reflectors

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Flat Cone Reflectors

Cat. No.	Fitter Type	Watts	Dia.	Std. Pkg.	List
4120		25-60	12	10	\$1.45
4140		100-150	14	10	2.00
4160		200	16	10	2.50

Threaded Type

4121		25-60	12	10	1.60
4141		100-150	14	10	2.15
4161		200	16	10	2.65

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Deep Bowl Reflector

Cat. No.	Fitter Type	Watts	Dia.	Std. Pkg.	List
2070		60-100	7	10	1.60
2080		150	8	10	1.80
2100		200	10	10	2.20

Threaded Type

2071		60-100	7	10	1.75
2081		150	8	10	1.95
2101		200	10	10	2.35

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Angle Reflector

Cat. No.	Fitter Type	Watts	Dia.	Std. Pkg.	List
5080		60	8	10	1.25
5100		100	10	10	1.45
5120		150	12	10	1.95
5140		200	14	10	2.85

Threaded Type

5081		60	8	10	1.40
5101		100	10	10	1.60
5121		150	12	10	2.10
5141		200	14	10	3.00

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Outlet Box Reflectors with Keyless Sockets

For Pull Sockets add to List \$1.20

Cat. No.	Flanged Reflectors	Watts	Dia.	Std. Pkg.	List
2000		60-100	12-14	10	2.60
4000		150	14-16	10	3.00
6000		200	16-18	10	4.00

Without Flange

2012		60-100	12	10	2.30
4014		150	14	10	2.60
6016		200	16	10	3.00

Shallow Bowl Reflector

Cat. No.	Fitter Type	Watts	Dia.	Std. Pkg.	List
BH10			10	10	.95
BH12	For medium		12	10	1.15
BH14	base lamps		14	10	1.50
BH16			16	10	1.90

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QD Rectangular Reflectors and Socket Fittings

Cat. No.	Horizontal Type "H"	Watts	Dia.	Std. Pkg.	List
5005H		50-60	6x8	10	2.85
5015H		100-150	8x10	10	3.50
5025H		200	8x10	10	4.10
5035MH		300-500	12x15	5	8.35

Vertical Type "V"

5005V		50-60	6x8	10	2.75
5015V		100-150	8x10	10	3.40
5025V		200	8x10	10	4.00
5035MV		300-500	12x15	5	8.20

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(Continued)

For Fittings see under

Page 26

For Pull Socket Fittings

see under Page 27

For Mogul "H" Fitting see
under Page 28

Outlet Box Type "B"

Cat. No.	Watts	Dia.	Std. Pkg.	List
5005B	50-60	6x8	10	\$2.65
5015B	100-150	8x10	10	3.30
5025B	200	8x10	10	3.90
MV	Mogul Vertical Socket			.85

With Medium Pull Socket

Extra for Pull Socket	.55
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QD Angle
Reflectors and
Socket Fittings

For Fittings see under
Page 26

For Pull Socket Fittings
see under Page 27

For Mogul Socket Fittings
see under Pages 23 and
28

Horizontal Type "H"

605H	15-40	6	10	1.90
606H	50-60	6	10	1.95
608H	100	8	10	2.10
610H	150	10	10	2.35
612H	200	12	10	2.65
614MH	300-500	14	5	4.15

Vertical Type "V"

605V	15-40	6	10	1.80
606V	50-60	6	10	1.85
608V	100	8	10	2.00
610V	150	10	10	2.25
612V	200	12	10	2.55
614MV	300-500	14	5	4.00

Outlet Box Type "B"

605B	15-40	6	10	1.70
606B	50-60	6	10	1.75
608B	100	8	10	1.90
610B	150	10	10	2.15
612B	200	12	10	2.45

With Medium Pull Socket

Extra for Pull Socket	.55
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QD Shallow Bowl
Reflector and
Socket Fittings

Vertical Type "V"

10V	60	10	10	1.65
12V	100	12	10	1.85
14V	150	14	10	2.20
16V	200	16	10	2.65

Horizontal Type "H"

10H	60	10	10	1.75
12H	100	12	10	1.95
14H	150	14	10	2.30
16H	200	16	10	2.75

Outlet Box Type "B"

10B	60	10	10	1.55
12B	100	12	10	1.75
14B	150	14	10	2.10
16B	200	16	10	2.55

Socket Fittings

QD Socket Fittings

H	Horizontal Type	10	.60
V	Vertical Type	10	.50
B	Outlet Box Type	10	.40

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QD Shallow Bowl Reflector and Pull Socket Fittings

Vertical Type "V"				
Cat. No.	Watts	Dia.	Std. Pkg.	List
10PV	60	10	10	\$2.20
12PV	100	12	10	2.40
14PV	150	14	10	2.75
16PV	200	16	10	3.20

Horizontal Type "H"

10PH	60	10	10	2.30
12PH	100	12	10	2.50
14PH	150	14	10	2.85
16PH	200	16	10	3.30

Outlet Box Type "B"

10PB	60	10	10	2.10
12PB	100	12	10	2.30
14PB	150	14	10	2.65
16PB	200	16	10	3.10

Pull Socket Fittings

QD Pull Socket Fittings

PV	Vertical Type	10	1.05
PH	Horizontal Type	10	1.15
PB	Outlet Box Type	10	.95

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Special Dome Reflectors with QD Socket Fittings

For Fittings See under
Page 26

Vertical Type "V"

8125V	100	12	10	2.64
8145V	150	14	10	2.79
8165V	200	16	10	3.34
8185MV	300-500	18	5	4.24

Horizontal Type "H"

8125H	100	12	10	2.75
8145H	150	14	10	2.90
8165H	200	16	10	3.45
8185MH	300-500	18	5	4.40

Outlet Box Type "B"

8125B	100	12	10	2.55
8145B	150	14	10	2.70
8165B	200	16	10	3.25
MH	Mogul Horizontal Socket			1.00

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Special Dome Reflectors with QD Pull Socket Fittings

For Pull Socket Fittings
See under Page 27

Vertical Type "V"

8125PV	100	12	10	3.20
8145PV	150	14	10	3.35
8165PV	200	16	10	3.90

Horizontal Type "H"

8125PH	100	12	10	3.30
8145PH	150	14	10	3.45
8165PH	200	16	10	4.00

Outlet Box Type "B"

8125PB	100	12	10	3.10
8145PB	150	14	10	3.25
8165PB	200	16	10	3.80

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Special Dome Reflectors

Fitter Type

8120	100	12	10	1.53
8140	150	14	10	1.76
8160	200	16	10	2.08

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(Continued)

Threaded Type

Cat. No.	Watts	Dia.	Std. Pkg.	List
8121	100	12	10	\$1.68
8141	150	14	10	1.91
8161	200	16	10	2.23

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Miscellaneous Parts and Fittings

Cat. No. 4507 Extra Stem,
per ft. 55c list

Cat. No.	Description	Std. Pkg.	List
4507	Swivel Canopy and Stem	5	2.10
61	Swivel Canopy	10	.75
71	Cord Grip	10	.10
6671	Cover and Cord Grip	10	.20
60	Outlet Cover	10	.65
169	Reflector Guard 8"	10	.55
170	Reflector Guard 10"	10	.75
172	Reflector Guard 12"	10	.90
174	Reflector Guard 14"	10	1.25
176	Reflector Guard 16"	10	1.65
178	Reflector Guard 18"	5	1.80
180	Reflector Guard 20"	5	2.55
55	Support Combination	10	1.25

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Fittings for use with Reflectors

Locking Guards for Reflectors

62	Canopy 1/2" Pipe	10	.40
66	Box Cover 4"	10	.10
54	Bushed Hanger	10	.45
63	Gooseneck 1/2" Pipe	10	.75
64	Wall Flange 1/2" Pipe	10	.35
65	Pole Flange 1/2" Pipe	10	.35
67	Porcelain Bushing 1/2"	10	.10
68	Porcelain Bushing 3/8"	10	.10
69	Wire Guard 8"	10	1.00
70	Wire Guard 10"	10	1.25
72	Wire Guard 12"	10	1.45
74	Wire Guard 14"	10	1.70
76	Wire Guard 16"	10	2.30
78	Wire Guard 18"	5	2.75

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Swivel Hangers and Shock Absorbers

Cat. No.	Description	Std. Pkg.	List Each
145G	Steel Swivel Hangers	10	.35
1945G	Sq. Steel Swivel H.	10	.50
145GA	Swivel Shock Absbr.	8	.60
1945GA	Sq. Swiv. Sh. Absbr.	8	.75
45G	Cast Iron Swivel Hgr.	10	.65

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Swivel Pendants

Plated Statuary Bronze
For extra stem per ft. add
to list \$0.65
For Switch Control add to
List \$1.00

With Glassware

Cat. No.	Watts	Dia.	Std. Pkg.	List
1051	100-60	4x10	12	5.20
1151	150-100	4x12	12	6.35
1251	200-150	6x12	12	6.75
1451	200-150	6x14	12	7.90
1651M	300-500	6x16	6	9.60

Without Glassware

4541	Adj.-Med.	4	12	3.15
4561	Adj.-Med.	6	12	3.55
4561M	Mogul	6	6	4.05
4581M	Mogul	8	6	5.05

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(Continued)

With Glassware

	Cat. No.	Watts	Dia.	Std. Pkg.	List
Ceiling Units	944	60	4x9	12	\$4.00
Plated Statuary Bronze	1044	100	4x10	12	4.60
	1244	150	4x12	12	5.75
	1444	200	6x14	12	7.25
	1544M	300-500	6x16	6	8.70
	1644M	300-500	6x16	6	8.90

Without Glassware

	644	Medium	4x6	12	2.15
	844	Medium	4x8	12	2.55
	864	Medium	6x8	12	2.90
	864M	Mogul	6x8	6	3.50
	1064M	Mogul	6x10	6	3.70
	1084M	Mogul	8x10	6	4.70

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With Glassware

	1057	100-60	4x10	12	5.80
Swivel Pendants	1157	150-100	4x12	12	6.95
Porcelain Enameled White	1257	200-150	6x12	12	7.20
For extra stem per ft. add to List \$0.65	1457	200-150	6x14	12	8.35
	1657M	300-500	6x16	6	10.05

For Switch Control add to List \$1.00

Without Glassware

	4547	Adj-Med.	4	12	3.75
	4567	Adj-Med.	6	12	4.00
	4567M	Mogul	6	6	4.50
	4587M	Mogul	8	6	5.50

Ceiling Units

Porcelain Enameled White

With Glassware

	947	60	4x9	12	3.55
	1047	100	4x10	12	3.95
	1247	150	4x12	12	5.10
	1447	200	6x14	12	6.45
	1547M	300-500	6x16	6	8.40
	1647M	300-500	6x16	6	8.55

Without Glassware

	647	Medium	4x6	12	1.70
	847	Medium	4x8	12	1.90
	867	Medium	6x8	12	2.10
	867M	Mogul	6x8	6	2.85
	1067M	Mogul	6x10	6	3.00
	1087M	Mogul	8x10	6	4.00

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With Colored Globe

	Cat. No.	Description	Std. Pkg.	List
Colored Units	302C	Keyless Socket	4	4.70
	301C	Pull Socket	4	5.30
Holder with glass packed in individual carton	300C	Plug-in-Switch	4	6.95

Standard packages may be made up of assorted types and colors.

With White Globe

	302W	Keyless Socket	4	3.95
	301W	Pull Socket	4	4.55
	300W	Plug-in-Switch	4	6.20

Without Globe

	302	Keyless Socket	12	2.30
	301	Pull Socket	12	2.90
	300	Plug-in-Switch	12	4.55

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Ceiling Collars

Porcelain Enameled Ivory

With Glassware				
Cat. No.	Watts	Dia.	Std. Pkg	List
4047	60-100	4x10	12	\$3.30
4247	150	4x12	12	4.45
6467	200	6x14	12	5.90
6667M	300-500	6x16	6	7.60

Without Glassware

447	Medium	4	12	1.25
667	Medium	6	12	1.55
667M	Mogul	6	6	2.05

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Cleartop Semi-Indirect

Plated Statuary Bronze
White Enameled Glass

With Decorated Glass				
1271D	100-150	6x12	4	10.80
1471D	200	6x14	4	13.80
1671MD	300-500	6x16	4	15.25

With Plain Glass

1271	100-150	6x12	4	9.60
1471	200	6x14	4	12.05
1671M	300-500	6x16	4	13.10

With Decorated Glass

1277D	100-150	6x12	4	11.75
1477D	200	6x14	4	14.75
1677MD	300-500	6x16	4	16.20

With Plain Glass

1277	100-150	6x12	4	10.55
1477	200	6x14	4	13.00
1677M	300-500	6x16	4	14.05

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Indirect Units

Porcelain Enameled Mat
Ivory

For extra stem per ft. add
to List \$0.65

For Switch Control add to
List \$1.00

When inner reflector is
omitted deduct from List
\$4.75 on 12 inch size and
\$5.75 on 14 inch size

With Inner Reflector				
1253	150-200	12	4	13.00
1453	200	14	4	15.00
1453M	300-500	14	4	15.50

Porcelain Enameled White Inside

1473	150-200	14	4	9.25
1473M	300-500	14	4	9.75
973	60-100	9	4	4.00
1373	150-200	13	4	4.90
1373M	300-500	13	4	5.40

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Wall Units

Porcelain Enameled White
Units with glass are packed
1 in a carton and various
kinds may be assorted to
make a Std. Pkg.

With Opal Half Shade				
Cat. No.	Description	Std. P	List	
227	Pull Socket-Outlet	12	3.05	
327	Keyless Socket-Outlet	12	2.40	
427	Pull Socket	12	2.75	
527	Keyless Socket	12	2.10	

Without Glassware

257	Pull Socket-Outlet	12	2.25	
357	Keyless Socket-Outlet	12	1.60	
457	Pull Socket	12	1.95	
557	Keyless Socket	12	1.30	

Ceiling Units

Porcelain Enameled White

With Opal Bowl Shade				
437	Pull Socket-Cord	12	2.75	
537	Keyless Socket	12	2.10	

Without Glassware

467	Pull Socket-Cord	12	1.95	
557	Keyless Socket	12	1.30	
477	Pull Socket-Cord	12	1.75	
577	Keyless Socket	12	1.00	

Ball Lamp Units

Porcelain Enameled White

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(Continued)

Wall Units

Plated Statuary Bronze

Cat. No.	Description	Std. Pkg.	List
221	Pull Socket-Outlet	12	\$3.35
321	Keyless Socket-Outlet	12	2.70
421	Pull Socket	12	3.05
521	Keyless Socket	12	2.40

Without Glassware

251	Pull Socket-Outlet	12	2.55
351	Keyless Socket-Outlet	12	1.90
451	Pull Socket	12	2.25
551	Keyless Socket	12	1.60

Ceiling Units

Plated Statuary Bronze

Cat. No.	Description	Std. Pkg.	List
431	Pull Socket-Cord	12	3.05
531	Keyless Socket	12	2.40

Without Glassware

461	Pull Socket-Cord	12	2.25
551	Keyless Socket	12	1.60
471	Pull Socket-Cord	12	2.00
571	Keyless Socket	12	1.25

Ball Lamp Unit

Plated Statuary Bronze

With Glassware

Cat. No.	Watts	Dia.	Std. Pkg.	List
941	100-60	4x9	12	4.70
1041	150-100	4x10	12	4.90
1341	150-100	4x12	12	6.05
1241	200-150	6x12	12	6.40
1441	200-150	6x14	12	7.55
1641M	300-500	6x16	6	8.75

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Commercial Units

Chain Hangers

Plated Statuary Bronze

For Switch Control add to List \$1.00 and indicate by Letter "S" after catalog number

For extra length chain and wire per foot add to List \$0.25

Without Glassware

102	Brass-Med.	2 1/4	12	2.75
103	Brass-Med.	3 1/4	12	2.80
104	Adj-Med.	4	12	2.85
106	Adj-Med.	6	12	3.20
106M	Mogul	6	12	3.35
108M	Mogul	8	6	4.35

Fixture Parts

Cat. No.	Description	Std. Pkg.	List
35	Mogul Socket 3/8"	20	.75
36	Adj-Med. Socket 3/8"	20	.70
36A	Adj-Med. Socket 1/2"	20	.70
36B	Adj-Med. Socket 1/4"	20	.70
37	Hickey 3/8 x 3/8"	20	.10
38	Hickey 1/2 x 3/8"	20	.15

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Outlet Box Receptacles

Flat Cover—Wire Leads

Cat. No.	Description	Std. Pkg.	List Ea.
41	Black 4" Rubber Cov.	20	0.29
41A	Black 4" Slow B.	20	.30
41G	Galv. 4" Rubber Cov.	20	.29
41AG	Galv. 4" Slow B.	20	.30
31	Black 3" Rubber Cov.	20	.27
31A	Black 3" Slow B.	20	.28
31G	Galv. 3" Rubber Cov.	20	.27
31AG	Galv. 3" Slow B.	20	.28

(Continued)

Flat Cover—No Leads

Cat. No.	Description	Std. Pkg.	List Each
43	Black 4"	20	\$0.25
43G	Galv. 4"	20	.25
33	Black 3"	20	.23
33G	Galv. 3"	20	.23

Raised Cover—Wire Leads

40	Black 4" Rubber Cov.	20	.30
40A	Black 4" Slow B.	20	.31
40G	Galv. 4" Rubber Cov.	20	.30
40AG	Galv. 4" Slow B.	20	.31
30	Black 3" Rubber Cov.	20	.28
30A	Black 3" Slow B.	20	.29
30G	Galv. 3" Rubber Cov.	20	.28
30AG	Galv. 3" Slow B.	20	.29

Raised Cover—No Leads

42	Black 4"	20	.26
42G	Galv. 4"	20	.26
32	Black 3"	20	.24
32G	Galv. 3"	20	.24

Flat Square Cover—Wire Leads

44	Black 4" Rubber Cov.	20	.35
44A	Black 4" Slow B.	20	.36
44G	Galv. 4" Rubber Cov.	20	.35
44AG	Galv. 4" Slow B.	20	.36

Flat Square Cover—No Leads

46	Black 4" sq.	20	.31
46G	Galv. 4" sq.	20	.31

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Outlet Box
Receptacles

